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Proximate Composition, Energy, Fatty Acid, Sodium, and Cholesterol Content of Finfish, Shellfish, and their Products

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Proximate Composition, Energy, Fatty Acid, Sodium, and Cholesterol Content of Finfish, Shellfish, and their Products

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Proximate Composition, Energy, Fatty Acid, Sodium and Cholesterol Content of Finfish, Shellfish, and their Products

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ABSTRACT

This document contains data concerning the proximate composition and energy, fatty acid, sodium, and cholesterol content of finfish, shellfish, and their products as listed in 228 articles published between the years of 1976 and 1984. Also included is a systematic index of the species as referenced in this document listed alphabetically by scientific name.

INTRODUCTION

The role of nutrition and diet in human health has been well established, but it has only recently become popular for a large segment of the U.S. population to actively select foods for health maintenance and disease prevention. The current wave of scientific and popular literature which correlates traditional, cultural diets with the incidence of disease has brought seafood to the attention of the health-conscious public. Epidemiological studies have shown that those cultures which predominantly consume fish have low incidence of heart attacks (Lands 1986; Nettleton 1985). These studies and their implications have generated considerable interest in the United States, where heart disease is the leading cause of death. There are unique polyunsaturated fatty acids in seafood which are purported to have a therapeutic effect in the prevention of cardiovascular disease. Those present in largest amounts are eicosapentaenoic acid and docosahexaenoic acid—popularly called EPA and DHA, respectively.

Concurrent with the recommendation to consume more fish for the prevention of heart disease, consumers are being advised to lower their fat intake, decrease the amount of saturated fats, keep the consumption of cholesterol below certain limits, and to omit salt from their diet. Nutritional information on seafood is currently available as isolated pockets of data from various laboratories, in Watt and Merrill (1963), and in Sidwell (1981). The latter is an extensive review of the nutritional literature through 1975 for many nutritional components.

The primary objective of this document is to provide a consolidated update of seafood nutritional data. It consists of a review of 228 publications from 1976 through 1984 and contains values for proximate composition, energy, total polyunsaturated fatty acids, sodium, and cholesterol content.

DISCUSSION

This document contains data from 228 publications and some unpublished data from the National Marine Fisheries Service, Northeast Fisheries Center, Gloucester, MA. Publications searched were limited by three criteria: (1) published 1975-84; (2) English text; and (3) species familiar and/or available to the U.S. consumer.

Finfish and shellfish are separated into two tables and are listed alphabetically by common name. The scientific name is provided only if the investigator supplied the information; otherwise, the scientific name is listed as ''Unspecified.'' Finfish for which only the scientific name was specified are listed alphabetically at the end of Table 1. A systematic index has also been provided listing species alphabetically by scientific name for cross-reference. If the scientific name was not provided in the reference, then the finfish and/or shellfish were not included in this index.

The column labeled ''Description'' briefly describes the sample used to generate the data. Unless otherwise specified, all samples were uncooked and unprocessed. ''Fresh'' means the sample was analyzed within 24 hours of capture, while ''fresh frozen'' means the sample was frozen within 24 hours of capture. ''Frozen'' indicates that the sample had been frozen prior to analysis, but the length of frozen storage and the time between capture and freezing were not specified. ''Raw'' is assigned to samples uncooked, never frozen, but of questionable freshness, such as store-bought fish. The analysis of seafood has become very specialized, and the portions analyzed and reported have expanded from fillets and whole fish to include such items as mechanically deboned meat or the

triglyceride fraction of the fat, etc. The amount of explanation required to define a sample, therefore, has become rather extensive, and many other abbreviations have been included, all of which are detailed in the Legend.

The column labeled "Location" is the geographic area of catch. For the most part, specific areas of catch were simplified into quadrants of the Pacific and Atlantic Oceans (e.g., NW Atlantic). This was done to (1) eliminate the need for many abbreviations such as OR and WA, many of which are not universally understood, and (2) clarify the general area of catch, because some articles mentioned local waterways (e.g., Casco Bay), which were not found on the world map. The majority of the catch was from the Northwest (NW) Atlantic and and the Northeast (NE) Pacific.

Moisture, protein, fat, ash, and carbohydrate are expressed as standard proximate composition. Values from two or more sources for any one component of a given species were reported individually and not averaged, due to the complexity of calculating an accurate average given the wide variety of sampling techniques. Some subjective liberties were taken in handling data from different sources. Some of the literature, for example, contained reams of data generated over many months of observation, while others contained observations of 100 individual fish of one species. The former data lent itself to reporting a range, while the latter (which might vary by only one decimal point) lent itself to averaging and reporting individual data points. It is recommended that the referenced articles be perused in their entirety for the actual data handling.

Fat and moisture content for any one species fluctuates depending on season and location of catch, size, spawning cycles, etc., and variability can be expected in the data. Moisture content may also fluctuate on frozen samples depending on drip loss during thawing. A frozen, retail product may have gone through several freeze/thaw cycles before it was analyzed, thus affecting the drip loss and subsequent moisture determination. This loss in moisture content is reflected as a gain in the other constituents of the proximate composition.

The caloric content was supplied in the table only if provided in the source article. The energy value can be estimated by the following formula:

$$\text{Energy value (estimated)} = (4\times \text{ protein}) + (4\times \text{ carbohydrate}) + (9\times \text{ fat}).$$

Large fluctuations in the fat content would be reflected in a wide range of caloric values.

The value in the "PUFA" column shows the percentage of total fatty acids present as polyunsaturated fatty acids (PUFA). Polyunsaturated fatty acids are those fatty acids with two or more sites of unsaturation (i.e., two or more double bonds). Saturated fats (no double bonds) and monoenes (one double bond) account for the remaining percentile. If the PUFA is reported as percent wet weight (WW), the author has provided the data as the percent of the tissue sampled. The latter is very useful for calculating the amount of the diet consumed as PUFA. Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) comprise a major portion of the PUFA and are the fatty acids which are purported to be therapeutically beneficial in the prevention of cardiovascular disease.

There is a wide range of sodium content in seafood. Unprocessed, straight-from-the-sea seafood has relatively small amounts of sodium. Breading, brining, and canning, to mention a few practices, contribute to higher sodium content. Shellfish are sometimes sprayed with a sodium salt solution for the maintenance of color and quality, and finfish fillets are often treated with a sodium salt dip to preserve texture and reduce drip loss. This will also be reflected in elevated sodium levels in the thawed product. There is a slight uptake of sodium into the flesh of fish held at sea in recirculated seawater. Smoked products will have a high sodium content because they are cured with salt prior to smoking.

The American Heart Association has established the following guidelines for ingestion of cholesterol: 300 mg/day for adult men and 225 mg/day for adult women. Finfish are generally low in cholesterol (about 50-70 mg/4 oz. serving), and 95-99% of their total sterols are present as cholesterol. Cholesterol is also the major sterol in shellfish that eat other animals, such as crabs, lobster, squid, and shrimp. These shellfish have higher levels of cholesterol than finfish. However, shellfish such as mussels, oysters, and clams (the bivalves), which subsist on algae, have low levels of cholesterol, about 30-50% of total sterols, and the balance are plant sterols. Some authors have chosen to report cholesterol as a percentage of total sterols. This does not provide information on cholesterol levels in the sample tissue. Cholesterol is a constituent of the fat and, as such, can be expected to fluctuate with season, geographic location, and sex. It is not unreasonable to anticipate $\pm 20\%$ variability around the values given in the table.

This document is intended for general use. Many details such as specific area of capture, exact numbers used to generate the average, or minute description of the samples are best found by perusing the referenced articles. It should be remembered that finfish and shellfish are dependent on type and availability of food, unlike domesticated animals bred for human consumption which are fed a constant diet year-round. Thus, the data in these tables can provide only approximate amounts of the various components. Data accumulated over a year or more on any one species, and at monthly intervals on all sizes and spanning all locations where it can be found, would more accurately describe the species. In general, however, finfish are low in sodium, cholesterol, and fat. Shellfish are low in fat, a little higher in sodium, and the cholesterol varies depending on their feeding habits. All seafood contains the fatty acids EPA and DHA making seafood a healthy addition to any diet.

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Tables 1 and 2—Proximate composition, energy, polyunsaturated fatty acid, sodium, and cholesterol content of finfish, shellfish, and their products.

ABBREVIATIONS

BW	Brackish water	gr	Ground	SW	Seawater
DHA	Docosahexaenoic acid	HD	Hand deboned	TG	Triglyceride
DW	% dry weight	HS	Hand skinned	TL	% total lipids
E	East	MD	Mechanically deboned	Tr	Trace
EPA	Eicosapentaenoic acid	MS	Mechanically skinned	TS	% total sterols
FA	Fatty acids	NL	Neutral lipids	unsap.	Unsaponifiable
FFA	Free fatty acids	PL	Phospholipid	XS	Cross section
fr.	Freeze	PUFA	Polyunsaturated fatty acids	W	West
FW	Freshwater	RDA	Recommended Daily Allowance	WW	% wet weight

Table 1—Finfish

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Alewife, *Alosa pseudoharengus*											
Fresh, frozen, whole, ground	Lake Michigan	72.8		7.5	3.0		163.6				129
Commercial oil from whole fish	Unspecified			9.6						8.5 mg TL	6
Alfonsino, *Beryx splendens*											
Fillet, frozen	N.Z.	77.3	18.6	2.6	1.2						152
Whole body, frozen	N.Z.			6.2							152
Anchovetta, *Engraulis ringens*											
Oil	Chile:										
	Arica							27.0			3
	San Vicente							37.7			3
	Talcahuano							36.9			3
Anchovy											
Unspecified											
Oil	Mexico:										
	1975							43.30			2
	1978							36.20			2
Oil	Chile:										
	San Vicente							37.70			2
	Talcahuana							37.10			2
Commercial oil	Peru							32.50			1
Commercial oil	S. Africa							32.06			3
Oil	Peru							43.60			3
Anchoviella commersonii											
Fillet, midline, muscle, skin XS	Malaysia, retail			0.7				50.20			34
Anchovy, Chile, *Engraulis ringens*											
Unspecified	Unspecified							PL 28.00 TG 26.10			2
Anchovy, European, *Engraulis encrasicholus*											
Fillet	Unspecified			6.4				1.15 WW			27
Anchovy, Japanese, *Engraulis japonica*											
Adult:											
flesh	Japan			1.3-10.7				29.2			50
viscera	Japan			2.6-26.1				27.2			50
Juvenile:											
flesh	Japan			0.9-2.4				29.3			50
viscera	Japan			1.8-10.0				32.5			50
Anchovy, Madura, *Thrissocles kammalensis*											
Edible meat	Unspecified			0.6				34.2			125
Anchovy, Pacific, Unspecified											
Commercial oil	NE Pacific							37.39			3
Argentine, Unspecified											
Flesh, iced 2 d, then frozen	Nova Scotia			2				19			74
Argentine, Atlantic, *Argentina silus*											
Fillet	Unspecified			3.5				0.04 WW			27

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Barb, Filamented, *Puntius filamentosus*											
Fresh muscle	India			1.14				29.26			149
Barracouta, *Thyrsites atun*											
Frozen fillet	N.Z.	73	21.0	4.9	1.5			40.50	70		122
Barramundi, Unspecified											
Fresh fillet	Sydney, retail			2.1				34.6		46	121
Barramundi											
Lates sp.											
Fresh, frozen fillet	NW Australia			0.6				44.10			136
Lates calcarifer											
Fillet	Australia, retail			0.8				32.60			33
Bass, *Pristipomoides typus*											
Fillet, midline, muscle/skin XS	Malaysia, retail			1.6				36.30			34
Bass, Largemouth, Unspecified											
Fresh, frozen fillet	N.Y. State			1.3				43.10			77
Fresh fillet	N.Y. State							40.10			76
Bass, Rock, *Ambloplites rupestris*											
Fresh, frozen fillet	N.Y. State	80.5	17.8	0.7	1.0				50	50	78
Fresh, frozen fillet	N.Y. State			0.7				42.90			77
Raw edible portion	Unspecified	80.5	17.8	0.7	1.0						83
Bass, Striped, *Morone saxatilis*											
Fillet	Unspecified			2.1				0.71 WW			27
Eggs:											
yolk	San Fransisco Bay			3.8				36.50			26
oil globule				100.0				25.10			26
Bass, White, *Morone chrysops*											
Fresh, frozen fillet	N.Y. State	74.3	20.2	3.8	1.2				70	68	78
Fresh, frozen fillet	N.Y. State			2.1				31.60			77
Batfish, Spotted, *Drephane* sp.											
Fresh, frozen fillet	NW Australia			1.7				43.30			136
Bloater, Unspecified											
Grilled flesh	Unspecified	55.6	23.5	17.4		0	251		700		118
Bloater, *Coregonus hoyi*											
Fresh, frozen, whole, ground	Lake Michigan	65.7		16.0	2.1		2.360				129
Bluefish, *Pomatomas saltatrix*											
Edible, raw, skinned portion, iced <2 d	Virginia, retail	70.16	19.56	2.00	1.12				31.8		8
Same as above but cooked	Virginia, retail	62.74	24.40	1.98	1.35				29.7		8
Bluefish, Boston, Unspecified											
Breaded	Retail			7.4				1.2 WW			1
In batter, frozen	Retail			7.4						9.6	79
Bluegill, *Lepomis macrochirus*											
Fresh, frozen fillet	N.Y. State	81.3		0.69				0.25 WW		38	99
Above but baked	N.Y. State	70.5		1.19				0.52 WW		50	99
Above but pan fried	N.Y. State	65.6		6.25				1.97 WW		20	99
Above but deep fried	N.Y. State	49.7		18.44				4.80 WW		100	99
Boal fish, *Wallago attu*											
Body	India			2.55				40.60			32
Liver	India			7.5				34.80			32
Bream, Unspecified											
Fresh fillet	Sydney, retail			1.6				44.9		68	121
Unspecified	Sydney, retail			4.0				19.5		139	120
Bream, Rays, *Brama brama*											
Fillet	N.Z.	75.6	20.8	1.5	1.9						153
Whole body	N.Z.	72.0	18.6	5.5	3.9						153
Bullhead, Brown, *Ictalurus nebulosus*											
Fresh, frozen fillet	N.Y. State	78.5	18.6	2.7	1.1				60	75	78
Fresh, frozen, fillet, male	N.Y. State			2.82							76
Same as above but female	N.Y. State			2.21							76
Fresh, frozen fillet	N.Y. State			2.1				31.30			77
Burbot, *Lota lota*											
Fresh, frozen fillet	N.Y. State	78.4	20.7	0.7	1.1				70	85	78
Fresh, frozen fillet	N.Y. State			0.5				51.40			77

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Burbot, *Lota lota* (continued)											
Fillet	Unspecified			1.2				0.32 WW			27
Mature roe, fresh, unwashed	Finland	64.5	16.2	9.4	1.4						156
Mature roe, fresh, washed	Finland	77.7	13.2	6.8	0.6						156
Roe, unwashed	Finland							51.00			72
Roe	Finland			7.0							70
Posterior fillet	Lake Michigan			0.76							91
Anterior fillet	Lake Michigan			0.41							91
Belly flap	Lake Michigan			0.57							91
Butterfish											
Peprilus triacanthus											
Fresh fillet	NW Atlantic	80.4		1.6	1.45			40.2		47.8	82
1st fr. thaw cycle	NW Atlantic	83.5		1.9				30.1		48.6	82
3rd fr. thaw cycle	NW Atlantic	81.8		0.8	1.02			44.4		48.8	82
Psenopsis anomala											
Flesh	Japan			1.8				19.5			161
Callop, *Macquaria ambigua*											
Fillet	Australia, retail			7.7				36.70			33
Capelin, Unspecified											
Whole fish	Norway								13.25		66
Muscle & skin lipids	Unspecified							16.4			2
Muscle & skin lipids	Unspecified			10.8							2
Commercial oil	Unspecified							18.7			2
Commercial oil	Canada							12.20			1
Unspecified	Norway			11.10				18.3 EPA & DHA only			87
Capelin (Nonspawning), *Mallotus villosus*											
Fresh, frozen, gutted, & headed	NW Atlantic	69.83		12.00							15
Capelin (Spawning males), *Mallotus villosus*											
Fresh, frozen, gutted & headed	Newfoundland	85.1		1.3							133
Capelin (Summer), *Mallotus villosus*											
Whole	Barents Sea	66.5	12.5	18.3	1.7			PL 58.60 TG 24.40			25
Mince	Barents Sea	77.7	20.3	1.6	0.4			PL 65.50 TG 23.30			25
Oil	Barents Sea							FFA 33.50 TG 24.70			25
Capelin, *Mallotus villosus*											
Eviscerated	Unspecified			3.9				0.73 WW			27
Triglycerides:											
lean	Unspecified							10.60			2
fat								16.90			2
Whole	Norway		13.4	10.1	1.9			32			3
Muscle & skin lipids	Unspecified							16.4			126
Commercial oils	NW Atlantic							14.00			42
Commercial oils	Unspecified							18.7			126
Ripe roe, frozen	Scotland	70		26.3 DW				PL 49.00 NL 35.20		3.1 TL	146
Cardinalfish, *Epigonus* sp.											
Fillet, frozen	N.Z.	78.6	19.0	1.7	1.0						152
Whole body, frozen	N.Z.			9.1							152
Carp											
Unspecified											
Oil	Unspecified							21.20			1
Unspecified	Japan			5.74						720	1
Cyprinus carpio											
Raw mince	Unspecified			5.44				1.57 WW			95
Baked mince	Unspecified			5.85				1.73 WW			95
Deep fried mince	Unspecified			11.31				4.19 WW			95
Fillet	Israel, retail	73.1	16.7	9.2	1.0						7
Fresh, frozen fillet	N.Y. State	78.4		2.0	1.1						78
Fresh, frozen fillet	N.Y. State			2.0							77
Fillet	Unspecified			4.2				0.83 WW			27
Various	Unspecified			6.2				1.35 WW		680	27

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Carp, *Cyprinus carpio* (continued)											
MD	Michigan	69.95	13.53	15.56	0.96			PL 0.97 WW NL 2.44 WW		680	109
HD	Michigan	68.89	16.84	13.38	0.89			PL 0.97 WW NP 2.06 WW		350	109
Flesh	Michigan							35.49		309.89	109
Frozen minced	Unspecified			5.27				1.29 WW			98
Above but baked	Unspecified							1.46 WW			98
Above but deep fried	Unspecified							3.91 WW			98
Body:											
manure fed	Israel	71.53	15.35	10.90	2.43			19.00			148
pellet fed	Israel	70.0	16.2	11.9	2.3			17.30			148
pellet & oil fed	Israel	68.1	16.0	14.2	2.3			17.20			148
Carp, Crucian, *Carassius carassius*											
Flesh	Japan			1.1				28.2			161
Carp, Indian, *Puntius sarana*											
Whole	India			7.27				11.72			104
Carp, Silver, *Hypophthalmichthys molitrix*											
Fillet	Israel, retail	75.8	16.7	6.4	1.1						7
Catfish, Unspecified											
Raw	Unspecified								59		131
Oil (muscle)	Unspecified							12.7-35.0			1
Muscle	European waters			1.05-4.20						30.2-56.0	1
Catfish, Channel											
Unspecified											
Fillet	Unspecified			3.6				0.90 WW			27
Ictalurus punctatus											
Fillet	Unspecified			3.6				0.90 WW			28
Catfish, Fork-tailed, *Arius* sp.											
Fresh, frozen fillet	NW Australia			1.4				38.30			136
Catfish, Giant, *Netuma thalassinus*											
Fresh muscle	India			2.03				24.41			149
Catfish, Marine, *Arius dussumieri*											
Fresh muscle	India			4.86				25.82			149
Catfish, Stinging, *Heteropneustes fossilis*											
Fresh muscle	India			0.86				22.87			149
Char, Arctic, *Salvelinus alpinus*											
Frozen muscle	Arctic Bay	68.2	24.5	7.7					95		58
Chromide, Orange, *Etroplus maculatus*											
Fresh muscle	India			1.16				32.05			149
Cisco (Tullibee), *Coregonus artedii*											
Fillet	Unspecified			2.5				0.76 WW			27
Coalfish, Unspecified											
Muscle	European waters			0.56-0.83						46.0-53.0	1
Cod, Unspecified											
Liver oil	Unspecified							30.00			43
Liver Oil	Unspecified							44.30			16
Unspecified	Unspecified									43.0-53.9	143
Skinless	Unspecified									61.2	143
Muscle oil	U.K.							PL 55.10			1
Fillet	Retail			0.7							1
Fillet	Retail			0.65				0.2 WW		26.0	79
Breaded sticks	Retail			8.3				0.4 WW			1
Breaded sticks	Retail			8.35				0.45 WW		14.1	79
Muscle	European waters			0.3-0.57						20.0-40.0	1
Fresh	N. America			0.3						50	1
Dried	N. America			0.7						82	1
Roe	Norway			0.8				43.1 EPA & DHA only			87
Milt	Norway			8.6				39.8 EPA & DHA only			87
Soft roe	Norway								172.50		66
Roe	Norway								170.00		66
Unspecified	Sydney, retail			1.1				44.60		42	120
Fresh fillet	Retail	82.1	17.4	0.7		0	76		77		118
Frozen steaks	Retail	83.9	15.6	0.6		0	68		68		118
Baked with butter	Unspecified	76.6	21.4	1.2		0			96	340	118
Fried in batter	Retail	60.9	19.6	10.3		7.5	199		100		118

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Cod (continued)											
Unspecified (continued)											
Grilled steaks, butter & salt added	Unspecified	78.0	20.8	1.3		0	95		91		118
Poached in milk, butter & salt added	Unspecified	77.7	20.9	1.1		0	94		110		118
Steamed	Unspecified	79.2	18.6	1.0		0	83		100		118
Smoked, raw	Retail	78.0	18.3	0.6		0	79		1170		118
Poached in milk, butter added	Unspecified	73.7	21.6	1.6		0	101		1200		118
Dried, boiled in salt	Unspecified	64.9	32.5	0.9		0	138		400		118
Roe, raw	Unspecified	70.0	24.3	1.7		0	113				118
Roe, parboiled, then fried in crumbs	Unspecified	62.0	20.9	11.9		3.0	202		130		118
Breaded	Europe			0.98						32.2	1
Fillet	Europe			0.41						41.2	1
In bars	Europe			0.53						34.8	1
Fillet, MS	Unspecified	82.90	4.06	1.90	1.52						30
Gadus morhua											
Fillet	Unspecified			0.73				0.25 WW			27
Flesh	Unspecified							TG 17.90			2
Liver	Unspecified							TG 29.30			2
Thick steak	Unspecified			0.94							28
Tail steak	Unspecified			1.16							28
Fillet	Unspecified			0.73				0.26 WW			28
Flesh	Unspecified			0.61							28
Fresh fillet	NW Atlantic	81.5		0.6	0.9			60.5		46.0	82
1st fr.thaw cycle	NW Atlantic	81.1		0.6	0.8			57.9		50.5	82
3rd fr.thaw cycle	NW Atlantic	80.6		0.6	1.0			57.4		43.0	82
Skinless fillet	NW Atlantic	82.4	16.0	0.48	1.12					48.1	85
Minced:											
skin on fillet	NW Atlantic	82.0	16.7	0.42	0.89					45.0	85
V-cuts	NW Atlantic	80.9	17.3	0.55	1.15					5.3	85
belly flaps	NW Atlantic	81.7	17.3	0.52	0.49					55.3	85
Whole,fillet frozen	NW Atalntic			0.7				42.30			40
Whole, livers frozen	NW Atlantic			52.6				31.50			40
Liver oil	Nova Scotia							32.0			3
Fresh, frozen fillet	NE Pacific	81.37	17.57	0.63	1.18						80
White muscle	Unspecified			0.59							2
Fresh, edible portion	New England, retail	80.90	18.42	0.42	0.92				22.77	21.14	64
Smoked fillet	Australia, retail			0.6				50.20			33
Ripe roe, frozen	Scotland	74		13.2 DW				PL 49.10 NL 34.70		6.1 TL	146
Fillet, frozen	Canada, retail	81.4	17.9	0.90	1.2		85		57		24
Frozen cheeks & tongues	Canada, retail	83.3	14.6	1.1	1.1		72		190		24
Smoked fillet	Canada, retail	78.6	18.0	0.9	3.0		85		844		24
Fish cakes	Canada, retail	64.0	12.7	8.0	2.1	13.2			589		24
Fish sticks	Canada, retail	64.2	11.7	9.9	2.0	12.2			525		24
Cod, Ling											
Unspecified											
Fillet, MS	Unspecified	79.73	14.93	4.28	1.30						30
Ophiodon elongatus											
Fillet, iced 24 h	NE Pacific	79.9	18.1	1.42	1.22				13.9		38
Same as above but freeze dried	NE Pacific		90.0 DW	7.0 DW	6.1 DW				0.21 DW		38
Minced, unwashed, flesh, iced 1 d	NE Pacific	72.9									86
Same as above but freeze dried	NE Pacific	75.95									86
Edible flesh	NE Pacific	81.1	17.6	0.96	1.20						137
Cod, Pacific, *Gadus macrocephalus*											
Fillet	Unspecified			0.64				0.20 WW			27
Fillet, iced 24 h	NE Pacific	81.8	17.1	0.78	1.06				64.6		38
Same as above but freeze dried	NE Pacific		94.2 DW	4.3 DW	5.9 DW				0.36 DW		38
Minced, unwashed, flesh, iced 1 d	NE Pacific	79.35									86

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Cod, Pacific, *Gadus macrocephalus* (continued)											
Same as above but unwashed	NE Pacific	77.87									86
Edible flesh	NE Pacific	81.1	17.9	0.66	1.20						137
Flesh	Japan							30.1			161
Cod, Polar, Unspecified											
Unspecified	Norway			8.35				13.5 EPA & DHA only			87
Whole fish	Norway								181.33		66
Cod, Red, *Physiculus bacchus*											
Fillet	Australia, retail			0.5				48.70			33
Fillet, frozen	N.Z.	82	17.0	0.6	1.1			81.20	70		122
Cod, Rock, *Epinephelus tauvina*											
Fillet midline, muscle/skin XS	Malaysia, retail			0.6				43.00			34
Cod, Saffron, *Eleginus gracilis*											
Flesh	Japan			1.0				42.4			52
Codling, Unspecified											
Muscle	European waters			0.21-0.35						22.0-35.0	1
Crappie, Black, *Pomoxis nigromaculatus*											
Fresh, frozen fillet	N.Y. State	78.0	18.8	1.5	1.1				70	72	78
Fresh, frozen fillet	N.Y. State			1.5				38.30			77
Croaker, Atlantic, *Micropogon(ias) undulatus*											
Fresh, frozen, HS fillet	N.Carolina, commercial processor	80.26	19.52	1.21	1.00						158
Same as above but MS	Same as above	77.52	19.17	3.63	1.05						158
Edible, skinned portion, iced 2 d	Virginia, retail	79.37	18.13	1.90	1.08				55.5		8
Same as above but cooked	Virginia, retail	68.90	27.10	2.78	1.68				88.2		8
Fillet	Gulf of Mex.	79.53	18.36	1.24	0.99						103
Minced	Gulf of Mex.	78.81	17.89	1.73	1.03						103
Minced flesh, fresh	Gulf of Mex.	75.22	17.38	5.83	0.71			18.2			29
Curimbata, *Prochilodus scrofa*											
Fresh fillet iced ©24 h	Brazil distributor	76.5	20.4	2.3	1.3			17.5			100
Cusk, *Brosme brosme*											
Frozen fillet	Canada, retail	80.2	19.3	0.71	1.0		89		36		24
Cuttlefish, Pacific, Unspecified											
Liver oil	Unspecified							28			3
Cuttlefish, *Sepia* sp.											
Edible meat	India			0.6				37.3			125
Dogfish, Unspecified											
Muscle	European waters			2.1-16.3						28.4-73.0	1
Fried in batter	Retail	54.2	16.7	18.8		7.7	265		290		118
Dogfish, Spiny, *Squalus acanthias*											
Flesh	NE Pacific	70.6	17.4	13.4	0.80						137
Whole fish	NE Pacific	69.5	16.3	15.3	1.77						137
Fillet	Unspecified			10.1				2.58 WW			27
Steak anterior to dorsal fin, frozen	NE Pacific			14.1				27.60			40
Whole, liver frozen	NE Pacific			62.7				19.10			40
Fresh fillet	New England	71.5	12.6	14.5	0.9			22.65	19.46	68.1	63
Dory, John, Unspecified											
Fresh fillet	Sydney, retail			1.1				50.1		57	121
Dory, Lookdown, *Cyttus traversi*											
Fillet, frozen	N.Z.	78.9	18.1	2.5	0.7						152
Whole body, frozen	N.Z.			4.9							152
Dory, Silver Unspecified											
Unspecified	Sydney, retail			0.9				33.5		30	120
Cyttus novaezelandiae											
Fillet	N.Z.	80.6	17.1	1.2	0.9						153
Whole body	N.Z.	73.1	17.3	5.0	4.5						153
Drum, Black, *Pogonias cromis*											
Minced flesh, fresh	Gulf of Mex.	77.12	16.13	2.86	0.92						29
Minced flesh, frozen	Gulf of Mex.	80.25	16.44	2.22	0.90						29
Minced flesh	Gulf of Mex.							25.8			29

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Drum, Freshwater FW, *Aplodinotus grunniens*											
Fresh, frozen fillet	N.Y. State	77.4	18.0	3.2	1.2				60	64	78
Fresh, frozen fillet	N.Y. State			3.2				25.80			77
Eel, Unspecified											
Frozen, edible portion	Canada, retail	70.0	17.4	11.5	1.5		178		46		24
Type unspecified	Unspecified									95.0	143
Oil	Unspecified							3.50			1
Yellow eels, raw flesh	Unspecified	71.3	16.6	11.3		0	168		89		118
Yellow eels, stewed in water	Unspecified	61.3	20.6	13.2		0	201		84		118
Eel, American, *Anguilla rostrata*											
Edible portion, raw, yellow stage	Unspecified	72	19	9	1						88
Edible portion, smoked	Unspecified	50	19	28	2						88
Fillet	Unspecified			18.3				2.70 WW			27
Wild: muscle tissues	N. Carolina	77.1	19.1	3.4				30.0			116
Cultured:											
entire body, elvers	N. Carolina	85.6	10.9	2.0				36.4			116
muscle tissues:											
4 wk	N. Carolina	84.2	12.0	1.6				25.3			116
18 mo	N. Carolina	67.3	16.0	14.7							116
Eel, European, *Anguilla anguilla*											
Raw, silver stage	Unspecified	58-60	14	26-28			300				88
Fillet	Unspecified			24.5				0.79 WW			27
Eel, Long-finned, *Anguilla dieffenbachii*											
Feeding:											
trunk	N.Z.							35.00			142
tail	N.Z.							32.30			142
Eel, Short-finned, *Anguilla australis*											
Feeding:											
trunk	N.Z.			6.00				Oct. 32.40 Jan. 24.50			142
tail	N.Z.			19.90				Oct. 31.10 Jan. 25.20			142
Migratory:											
trunk	N.Z.			12.30				20.10			142
tail	N.Z.			20.10				18.30			142
Eel, Spiny, *Mastacembelus armatus*											
Fresh muscle	India			0.56				25.20			149
Eulachon, *Thaleichthys pacificus*											
Edible flesh	NE Pacific	79.6	14.6	6.25	1.25						137
Fish Meals:											
Bermuda	Unspecified			5.7				56.8			41
Capelin	Unspecified	8.9	68.6	15.2	10.0				0.59		46
Herring	Unspecified			13.0				45.2			41
Lanternfish, *Benthosema pterotum*	Unspecified	12.8	64.9	8.3	15.2				1.10		46
South African	Unspecified			5.5				45.4			41
White fish	Unspecified			5.6				38.9			41
Flathead, Unspecified											
Unspecified	Sydney, retail			1.6				29.8		58	120
Flathead, Knobby, *Suggrundus tuberculatus*											
Edible meat	India			0.7				20.9			125
Flounder, Unspecified											
Unspecified	Unspecified									41.0-60.0	143
Baked in butter	Unspecified								236		131
Flesh	N. America			0.8						50	1
Fresh fillet	Sydney, retail			0.7				34.7		33	121
Flounder, Arrowtooth *Atheresthes evermanni*											
Flesh, frozen	Japan			4.1				NL 16.0			54
Atheresthes stomias											
Edible flesh	NE Pacific	79.5	17.7	2.30	1.11						137
Flounder, Dab, *Hippoglossoides platessoides*											
Fillet	Unspecified			0.66							28
Flounder, Dab Japanese, *Limanda herzensteini*											
Flesh, frozen	Japan			1.0				25.9			54
Flesh	Japan			2.4				32.0			161

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Flounder, Greyback, *Glyptocephalus cynoglossus*											
Fillet	Unspecified			0.86							28
Flounder, Righteye, *Verasper moseri*											
Flesh, frozen	Japan			1.0				29.3			54
Flounder, Roundnose, *Eopsetta grigorjewi*											
Flesh, frozen	Japan			2.9				22.8			54
Flounder, Slime, *Microstomus achne*											
Flesh	Japan			11.8				28.9			161
Flounder, Starry, *Platichthys stellatus*											
Edible flesh	NE Pacific	80.3	17.3	1.40	1.12						137
Minced, unwashed, flesh iced 1 d	NE Pacific	78.0									86
Same as above but washed	NE Pacific	76.0									86
Flounder, Stone, *Kareius bicoloratus*											
Flesh	Japan			2.2				35.8			161
Flesh, frozen	Japan			3.0				20.5			54
Flounder, Winter, *Pseudopleuronectes americanus*											
Edible, raw, skinned portion, iced < 2 d	Virginia, retail	77.00	21.23	1.19	1.23				32.9		8
Same as above but cooked	Virginia, retail	70.96	26.05	2.06	1.48				35.9		8
Fillet	Unspecified			1.4							28
Flounder, Yellowtail, *Limanda ferruginea*											
Fillet	Unspecified			1.2				0.35 WW			27
Fillet	Unspecified			1.20				0.34 WW			28
Raw edible portion	Unspecified	79.4	19.6	1.5	1.1		97	17.20	176		83
Frogfish, *Batrachus grunniens*											
Fresh muscle	India			0.46				21.22			149
Frostfish, *Lepidopus caudatus*											
Fillet	N.Z.	78.4	19.2	1.1	1.1						153
Whole body	N.Z.	74.4	18.6	3.6	3.4						153
Garfish, *Hyporhamphus melanochir*											
Fillet	Australia, retail			1.0				48.70			33
Gemfish, Unspecified											
Fresh fillet	Sydney, retail			6.4				22.5		44	121
Gemfish (Kingfish), *Rexea solandri*											
Fillet	N.Z.	76.3	19.7	2.8	1.0						153
Whole body	N.Z.	73.0	17.9	6.4	2.7						153
Fillet	Australia, retail							47.10			33
Goosefish, *Lophius litulon*											
Flesh	Japan			0.4				30.1			161
Grenadier, Blue, *Macruronus novaezealandiae*											
Fillet	Australia, retail			0.5				47.70			33
Grenadier, Roundnose, *Coryphaenoides rupestris*											
Fresh, frozen fillet	Newfoundland	83.58		0.69							14
Grenadier, Roughhead, *Macrourus berglax*											
Fillet, fresh, iced	Newfoundland	89.19		0.47							13
Groper, Blue, *Achoerdus gouldi*											
Fillet	Australia, retail			7.8				57.80			33
Grouper, Red, *Epinephelus morio*											
Fresh, frozen fillet	Gulf of Mex.	77.97	21.71	0.88	1.20			41.15	46.7		31
Above but baked	Gulf of Mex.	72.54	26.12	1.14	1.30			40.76	49.5		31
Above but broiled	Gulf of Mex.	72.33	23.22	1.18	1.46			43.33	55.8		31
Above but deepfried	Gulf of Mex.	68.62	24.38	3.73	1.50			53.38	57.7		31
Above but microwaved	Gulf of Mex.	72.29	21.86	1.41	1.49			35.39	54.5		31
Gurnard, *Chelodonichthys kumu*											
Skinned fillet	N.Z.	77.3	21.5	0.59	1.57			19.60	109		47
Gurnet, Unspecified											
Unspecified	Japan			1.92						25	1
Haddock											
Unspecified											
Unspecfied	Unspecified									41.0-64.0	143
Breaded, fried	Unspecified								176		131
"Krisps", breaded	Retail			17.6				8.8 WW			1
Muscle	European waters			0.29-0.42						27.2-35.0	1
Flesh	N. America			0.1						50	1
Fresh, raw fillets	Unspecified	81.3	16.8	0.6		0	73		120		118

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Haddock (continued)											
Unspecified (continued)											
Headed, boned, fried in crumbs	Unspecified	65.1	21.4	8.3		3.6	174		180	118	
Steamed	Unspecified	75.1	22.8	0.8		0	98		120		118
Smoked, steamed flesh	Unspecified	71.6	23.3	0.9		0	101		1220		118
Muscle	N. America									90	1
Melanogrammus aeglefinus											
Ripe roe, frozen	Scotland	86		10.7 DW				PL 49.40 NL 38.60		9.5 TL	146
Frozen fillet	Canada, retail	81.5	17.7	0.76	0.8		82		66		24
Fish sticks	Canada, retail	59.9	13.0	10.0	2.0	15.1			535		24
Fillet	Unspecified			0.66				0.18 WW			28
Thick steak	Unspecified			0.71							28
Tail steak	Unspecified			0.77							28
Fillet	Unspecified			0.66				0.18 WW			27
Flesh, frozen	North Sea			0.7				58.80			42
Hake, *Merluccius merluccius*											
Frozen fillet	Israel, retail	78.8	18.9	0.93	1.3						7
Hake, Pacific, *Merluccius productus*											
Fillet	Unspecified			1.5				0.59 WW			27
Fillet, iced 24 h	NE Pacific	83.3	15.7	1.44	0.96				66.3		38
Same as above but freeze dried	NE Pacific		94.3 DW	8.6 DW	5.8 DW				0.40 DW		38
Hake, Red, *Urophycis chuss*											
Skinless fillet	NW Atlantic	84.5	14.1	0.36	1.07					35.1	85
Minced	NW Atlantic	83.1-83.2	14.8-15.2	0.4-0.5	1.3-1.6					45.3-49.0	85
Hake, Silver (Whiting), *Merluccius bilinearis*											
Fillet	Unspecified			3.8				1.34 WW			27
Commercially scaled:											
skinless fillet	NW Atlantic	82.4	15.1	1.37	1.17					44.3	85
mince	NW Atlantic	81.9-82.6	14.3-14.9	1.5-1.9	1.3-1.5					46.8-68.1	85
Hand-scaled:											
skinless fillet	NW Atlantic	82.0	15.0	1.92	1.12					42.2	85
mince	NW Atlantic	81.4-82.0	14.9-15.5	1.9-2.0	1.1					44.0-57.0	85
Hake, South African, *Merluccius capensis*											
Fillet	Australia, retail			5.7				20.40			33
Fillet	Unspecified			1.6				0.49 WW			27
Muscle	Unspecified			1.55							2
Halfbeak, *Hyporhamphus unifasciatus*											
Dried edible portion	Unspecified			5.5				1.70 WW			27
Halibut, Unspecified											
Unspecified	Unspecified									34.0-58.0	143
Muscle	U.K.							PL 56.70			1
Flesh	N. America			1.2						50	1
Raw	Unspecified	78.1	17.7	2.4		0	92		84		118
Steamed	Unspecified	70.9	23.8	4.0		0	131		110		118
Steak, frozen	Canada, retail	76.2	20.4	4.0	1.2				57		24
Halibut, Atlantic, *Hippoglossus hippoglossus*											
Fillet	Unspecified			1.1				0.61 WW			27
Whole:											
thick steak	Unspecified			3.1							28
tail steak	Unspecified			1.2							28
White meat:											
thick steak	Unspecified			1.14							28
tail steak	Unspecified			0.74							28
Dark meat:											
thick steak	Unspecified			8.5							28
tail steak	Unspecified			3.9							28
Fillet	Unspecified			1.1				0.43 WW			28
Halibut, Black, Unspecified											
Muscle	European waters			8.9-17.2						43.0-50.0	1
Halibut, Indian, *Psettodes erumei*											
Fresh muscle	India			0.92				32.49			149
Minced fillet	India	76.12	21.60	0.915	0.7757	430.6 mg	98.8		195.5		106
Halibut, N.E. Pacific, *Hippoglossus stenolepis*											
Edible flesh	NE Pacific	78.3	20.7	0.79	1.35						137
Fillet	Unspecified			2.0				0.55 WW			27

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Halibut, N.E. Pacific, *Hippoglossus stenolepis* (continued)											
Thick steak	Unspecified			0.9							28
Tail steak	Unspecified			0.7							28
Steak anterior to dorsal fin, frozen	NE Pacific			1.6				27.70			40
Halibut, White, Unspecified:											
Muscle	European waters			0.35-0.60						24.0-34.0	1
Herring											
Unspecified											
Oil	Alaska							18.0-28.2			140
Oil	Nova Scotia							9.0-24.5			140
Unspecified	Unspecified									82.0-83.8	143
Kippered	Canada, retail	63.6	19.7	9.9	3.3		173		875		24
Flesh, iced 2 d then frozen	Nova Scotia			14				23			74
Oil	Unspecified							59.7			113
Commercial oil	Norway							21.30			1
Muscle	European waters			10.6-24.2						53.2-66.4	1
Flesh	N. America			11.3						85	1
Whole	Norway			17.90				6.5 EPA & DHA only			87
Whole	Norway								245.00		66
Canned in tomatoe sauce	Sydney, retail			12.0				24.5		81	121
Canned in oil	Sydney, retail			8.4				42.7		52	121
In tomatoe sauce	Sydney, retail			6.4				30.4		88	120
Canned in water	Sydney, retail			12.5				13.5		138	120
Pickled	Sydney, retail			6.4				10.4		132	120
Raw flesh	Unspecified	63.9	16.8	18.5		0	234		67		118
Fried flesh, skin & roes in oatmeal	Unspecified	58.7	23.1	15.1		1.5	234		100		118
Grilled flesh	Unspecified	65.5	20.4	13.0		0	199		170		118
Roe, raw	Unspecified	82.0	13.3	3.0		0	80				118
Roe, fried in flour	Unspecified	52.3	21.1	15.8		4.7	244		87		118
Smoked	Unspecified								6158		131
Muscle & skin lipids	Unspecified							18.3			2
Muscle & skin	Unspecified			3.3-22.8							2
Commercial oil	Unspecified							10.2			2
Muscle	Canada							PL 48.50			1
Fillet	Unspecified			4.6							28
Extra hepatic tissue	Hatchery-reared							NL 29.45 PL 55.41			117
Commercial oils	Unspecified							11.1			2
Commercial oils	Unspecified							11.1			126
Whole	Norway								122.67		66
Clupea harengus											
Ripe roe, frozen	Scotland	74		14.6 DW				PL 48.70 TG 32.90		8.3 TL	146
Whole	Norway		16.3	17.9	2.1			20			3
Flesh, frozen	North Sea			12.9				41.10			42
Muscle & skin lipids	Unspecified							18.3			126
Commercial oils	Unspecified							10.2			126
Meat	Canada									0.06 TL	68
Oils	Unspecified							8.6-23.7			2
Phospholipids	Unspecified							48.70			2
Triglycerides	Unspecified							13.00 2			
Whole	Unspecified			16.4							28
Whole	Unspecified			16.4				2.40 WW			28
Roe	Finland							50.30			72
Roe	Finland			2.4							70
Mature roe, fresh, unwashed	Finland	75.0	16.8	3.0	1.0						156
Same as above, but washed	Finland	78.4	17.8	2.6	0.4						156
Clupea pallasii											
Flesh	Japan			8.3				17.6			161

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Herring, Atlantic, *Clupea harengus harengus*											
Fillet	Unspecified			6.2				1.41 WW			27
Whole	Unspecified			16.4				2.39 WW			27
Herring, Lake, *Coregonus artedii*											
Whole fillet, frozen	Unspecified			2.5				33.80			40
Herring, North Sea, Unspecified											
Commercial oil	North Sea							31.95			3
Unspecified	Norway			14.1				12.6 EPA & DHA only			87
Herring, Pacific, *Clupea harengus pallasi*											
Flesh	NE Pacific	70.7	16.0	12.5	1.28						137
Whole	NE Pacific	70.8	16.4	12.8	2.4						137
Fillet	Unspecified			11.1				1.67 WW			27
Whole fillet, frozen	NE Pacific			12.8				23.80			40
Commercial oil	Unspecified							16.90			2
Herring, Round											
Dussumicria hasseletii											
Fillet midline, muscle/skin XS	Malaysia, retail			1.1				51.40			34
Etrumeus teres											
Fillet	Unspecified			4.4				1.55 WW			27
Dried edible portion	Unspecified			7.2				1.52 WW			27
Herring, Thread, *Opisthonema oglinum*											
Raw	Florida	75.22	20.05	2.71	3.04			37.6			45
Canned	Florida	70.81	23.21	3.41	3.21			41.35			45
Headed, gutted, frozen	Gulf of Mex.	73.23	20.65	3.22	3.68						44
Fillet	Gulf of Mex.	75.68	20.63	2.58	1.36						44
Unspecified	Unspecified							37.8			44
Hoki, *Macruronus novaezealandiae*											
Fillet, frozen	N.Z.	78.5	18.5	2.50	1.2			29.50	62.5		122
Javelin Fish, *Lepidorhynchus denticulatus*											
Fillet, frozen	N.Z.	81.7	16.9	0.80.8							152
Whole body, frozen	N.Z.			5.5							152
Jewfish, Unspecified											
Fresh fillet	Sydney, retail			1.3				39.3		49	121
Jewfish, Silver											
Johnius argentatus											
Fresh muscle	India			1.63				27.56			149
Minced fillet	India	77.80	20.46	1.630	0.6677	429.6 mg	100.8		160.2		106
Edible meat	India			0.35				29.0			125
Johnius Pseudosciaena soldado											
Fillet midline muscle/skin XS	Malaysia, retail			2.1				29.80			34
Jobfish, Smalltooth, *Aphareus rutilans*											
Edible meat	India			0.22				40.2			125
Kalava, *Serranus hexagonatus*											
Edible meat	India			0.5				34.6			125
Kingfish, Unspecified											
Fresh fillet	Sydney, retail			1.9				33.7		32	121
Kingfish, Silver, *Rexea solandri*											
Fillet, frozen	N.Z.	70	9.5	12.1	1.1			17.20	50		122
Kipper, Unspecified											
Canned fillets	Unspecified			27.7				9.9 WW			1
Canned fillets	Unspecified			27.7						19.4	79
Flesh	Unspecified	58.7	25.5	11.4		0	205		990		118
Leatherjacket											
Unspecified											
Fresh fillet	Sydney, retail			0.7				53.9		26	121
Family *Aluteridae*											
Fillet	Australia, retail			0.5				53.40			33
Parika scaber (Triggerfish)											
Fillet	N.Z.	79.4	18.5	0.9	1.0						153
Whole body	N.Z.	75.0	17.2	1.7	6.2						153
Ling											
Unspecified											
Muscle	European waters			0.34-0.57						29.0-46.0	1

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Ling (continued)											
Genypterus blacodus											
Fillet	N.Z.	78.3	19.7	0.8	1.0						153
Whole body	N.Z.	76.8	18.5	1.5	3.3						153
Lumpfish, Unspecified											
Whole body:											
female	Norway								235.50		66
male	Norway								240.00		66
Lumpsucker, Unspecified											
Female	Norway			1.8				21.2 EPA & DHA only			87
Male	Norway			3.8				20.5 EPA & DHA only			87
Mackerel											
Unspecified											
Unspecified	Unspecified									60.0-80.0	143
Canned	Unspecified									102.0	143
Raw	Unspecified								47		131
Flesh, iced 2 d then frozen	Nova Scotia			9				25			74
Canned:											
meat	Retail			7.9				1.9 WW			1
liquor	Retail			20.2				4.4 WW			1
Muscle	European waters			17.9-22.5						34.0-38.8	1
Flesh	N. America			12.2						95	1
Unspecified	Japan			5.23						15	1
Unspecified	Norway			17.35				13.6 EPA & DHA only			87
Whole	Norway								160.00		66
Muscle/skin lipids	Unspecified							25.8			2
Muscle & skin	Unspecified			12.2							2
Commercial oil	Unspecified							23.6			2
Muscle	Canada							PL 52.60			1
Canned:											
meat	Retail			7.9				1.95 WW			79
liquor	Retail			30.2				5.30 WW			79
Raw	Unspecified	64.0	19.0	16.3		0	223		130		118
Fried flesh	Unspecified	65.6	21.5	11.3		0	188		150		118
Rastrelliger kanagurta											
Fillet midline, muscle/skin XS	Malaysia, retail			2.2				40.30			34
Minced edible portion	India	71.19	21.21	7.51	1.33	0.50	154.40		100.16		108
Scomber japonicus											
Fillet, frozen	N.Z.	75	23.0	2.1	1.5			22.70	55		122
Flesh	Japan			14.1				25.8			161
Raw	Florida	73.73	21.08	3.07	2.66			42.7			45
Canned	Florida	69.77	24.79	3.30	3.03			45.45			45
Eviscerated	Unspecified			14.8				3.61 WW			27
White muscle	Japan									98.9 TS	145
Dark muscle	Japan									98.2 TS	145
Frozen	(written in Chinese)	71.8	17.7	8.6	1.3	0.5					89
Frozen meat paste	(written in Chinese)	70.7	16.6	5.7	0.9	0.4					89
Muscle:											
Aug.	Unspecified			10.8							2
Jan.	Unspecified			15.5							2
Male:											
Dorsal flesh:											
white	Japan			5.4				13.3			144
dark	Japan			17.4				13.8			144
Tail flesh:											
white	Japan			1.9				5.8			144
dark	Japan			7.9				11.8			144
Ventral flesh	Japan			15.8				14.7			144
Female:											
Dorsal flesh:											
white	Japan			17.4				26.1			144
dark	Japan			44.8				27.1			144

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Mackerel, *Scomber japonicus* (continued)											
Female: (continued)											
Tail flesh:											
white	Japan			14.3				26.3			144
dark	Japan			27.0				29.1			144
Ventral flesh	Japan			49.5				31.4			144
Mackerel, Atlantic, *Scomber scombrus*											
Frozen fillet	Canada, retail	69.5	18.7	9.8	1.2		168		89		24
Fresh fillet	Nova Scotia	67.7	17.8	12.6				27.6			75
Fillet	Unspecified			9.8				2.44 WW			27
Fillet	Unspecified			12.6				3.24			28
Meat	Unspecified									0.22 TL	68
Edible portion	Unspecified		17	27				20.50		80	155
Flesh:											
Dec.	Unspecified			24.1							28
June	Unspecified			9.1							28
Flesh, frozen	North Sea			10.3				48.30			42
Whole fillet, frozen	NW Atlantic			12.9				30.00			40
Dressed portion	NW Atlantic	69.3	17.4	12.8	1.1				22.10		90
Belly	NW Atlantic	64.8	16.1	18.6	0.9						90
Dark muscle	NW Atlantic	68.1	17.3	14.1	1.1			Male: 17.7			90
								Female: 15.2			
White muscle	NW Atlantic	71.5	18.9	9.1	1.2			Male: 21.3			90
								Female: 19.6			90
White muscle	Unspecified							25.0			73
Dark muscle	Unspecified							27.5			73
Dark muscle			14.1								83
White muscle			9.1								83
Belly portion			18.6								83
Winter:											
thick steak	Unspecified			18.8							28
tail steak	Unspecified			12.6							28
Summer:											
thick steak	Unspecified			3.2							28
tail steak	Unspecified			4.9							28
Muscle & skin lipids	Unspecified							25.8			126
Commercial oils	Unspecified							23.6			126
Male:											
dark muscle	Unspecified			12.84							83
white muscle	Unspecified			3.32							83
belly	Unspecified	27.84									83
Female:											
dark muscle	Unspecified	8.94									83
white muscle	Unspecified			2.21							83
belly	Unspecified			22.20							83
Spring:											
whole fillet	NE Atlantic			16.1-19.1							28
fillet	NW Atlantic			8							28
light meat	NW Atlantic			2.2-4.9							28
Summer:											
whole fillet	NE Atlantic			3.9-9.1							28
light meat	NW Atlantic			4.6-7.6							28
Fall:											
whole fillet	NE Atlantic			9.9-14.3							28
fillet	NW Atlantic			8.6-25.5							28
light meat	NW Atlantic			10.2-18.8							28
Winter:											
whole fillet	NE Atlantic			15.7-24.1							28
light meat	Unspecified			10.2							2
dark meat	Unspecified	14.4									2
dorsal meat	Unspecified			2.1							2
Muscle:											
Dec.	Unspecified			24.1							2
June	Unspecified			9.1							2
Mackerel, Blue, *Scomber australasicus*											
Fillet, frozen	N.Z.	66.40	22.53	9.98	1.45			Male: 31.9-41.5			151
								Female: 35.1-41.3			

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Mackerel, Horse											
Unspecified											
Whole	Norway								660		66
Unspecified	Norway			12.6				13.0 EPA & DHA only			87
Trachurus trachurus											
Flesh	Japan			1.2				23.9			161
Mackerel, Horse "Jural", *Trachurus murphyi*											
Oil	Chile:										
	North							42.5			3
	South							38.4			3
Mackerel, Jack											
Trachurus declivis											
Fillet, frozen	N.Z.	72.35	21.3	5.15	1.35						151
Fillet, frozen	N.Z.	73	22.0	6.0	1.3			21.00	55		122
Trachurus novaezelandiae											
Fillet, frozen	N.Z.	74.55	21.08	3.18	1.40						151
Mackerel, Japanese, *Trachurus japonicus*											
Eviscerated	Unspecified			6.8				1.97 WW			27
Mackerel, Rake-gilled, *Rastelliger kanagurta*											
Fillet	Unspecified			6.0				0.95 WW			27
Mackerel, Seer, *Scombermorous guttatum*											
Fillet	Unspecified			15.5				2.63 WW			27
Mackerel, Spanish, *Scomberomorous maculatus*											
Fresh, frozen fillet	Fla., Atlantic	62.94	18.97	13.75	1.12			29.95	44.8		31
Above but baked	Fla., Atlantic	65.35	21.76	12.66	1.26			29.24	48.2		31
Above but broiled	Fla., Atlantic	62.24	22.88	13.18	1.38			31.01	52.2		31
Above but deep fried	Fla., Atlantic	58.88	22.74	12.42	2.25			38.78	60.9		31
Above but microwaved	Fla., Altantic	61.45	23.87	13.61	1.37			30.23	56.5		31
Fresh, frozen fillet	Gulf of Mex.	71.71	20.42	7.71	1.27			27.20			101
Maria "Burbot", *Lota lota*											
Commercial oil	Unspecified			3.7						19.9 mg TL	6
Menhaden											
Unspecified											
Refined oil	Unspecified							34.90			130
Oil	Unspecified							39.3			113
Crude oil	NW Atlantic							30.31			138
Commercial oil	USA							27.60			1
Commercial oil	USA							39.30			3
Commercial oil	Unspecified							17.3-38.5			140
Commercial oil	Gulf of Mex. East							31.87			3
Commercial oil	Gulf of Mex. West							35.90			3
Commercial oil	Miss. delta							28.67			3
Commercial oil	Chesapeake Bay							33.81			3
Commercial oil	NW Atlantic							38.49			3
Oil	Unspecified							34.00			139
Brevoortia patronus											
Fresh, frozen. gr. whole bodies	Gulf of Mex.	64.55	16.25	15.54	4.55			44.16			23
Brevoortia tyrannus											
Fresh, frozen, gr. whole bodies	Chesapeake Bay	70.68	16.47	8.39	4.70			40.50			23
Body lipids	Nova Scotia							PL 38.62 TG 31.82			4
Whole body, frozen	NW Atlantic			15.5				31.70			40
Unspecified	Unspecified							PL 36.40			2
								TG 27.20			2
Moki, Blue, *Latridopsis ciliaris*											
Skinned fillet	N.Z.	75.9	19.6	4.27	1.37			38.80	81		47
Fillet	N.Z.	76.3	20.7	1.6	1.3						153
Whole body	N.Z.	70.9	19.4	5.7	4.0						153
Monkfish											
Kathetostoma giganteum											
Fillet, frozen	N.Z.	79	18.0	2.31.2				20.70	85		122
Lophius piscatorius											
Fresh, edible portion, iced < 1 d	New England	83.29	15.85	0.53	1.21				18.48	18.58	64

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Morwong, *Nemadactylus macropterus*											
Fillet	Australia, retail			1.0				40.40			33
Mullet											
Unspecified											
Fresh fillet	Sydney, retail			1.8				31.9		34	121
Liza sp.											
Fresh, frozen fillet	NW Australia			3.0				35.50			136
Mugil oeur											
Minced edible portion	India	75.77	20.22	2.45	1.62	0.90	105.53		99.08		108
Mugil cephalus BW											
Fresh, frozen fillet	Florida			1.5-8.9				14.3-29.6			21
Fresh roe	Fla., retail	61.5	22.6	13.7	1.8			35.09		440	94
Salted & dried roe	Fla., retail	30.5	35.5	25.7	5.4						94
Fresh muscle	India			5.06				19.42			149
Fresh whole body	Japan			3.1							162
Fillet	N.Z.	73.4	21.6	3.4	1.1						153
Whole body	N.Z.	64.4	19.5	10.7	5.5						153
Eviscerated	Unspecified			5.9				1.52 WW			27
Frozen roe	Fla., retail	52.00	25.96	15.05	1.31	5.68					59
Fillet midline, muscle/skin XS	Malaysia, retail			1.9				28.50			34
Whole body, frozen	NW Atlantic			2.8				38.55			40
Roe lipid	Korea							By lipid class			65
Minced flesh, fresh	Gulf of Mex.	80.56	14.19	1.89	0.84						29
Minced flesh, frozen	Gulf of Mex.	81.96	15.25	1.33	0.84						29
Minced flesh	Gulf of Mex.							34.5			29
Minced fillet	India	74.94	20.84	5.060	0.5898	509.1 mg	134.8		136.4		106
Mullet, Jumper, *Liza argentea*											
Fillet	Australia, retail			4.9				22.80			33
Mullet, Red, Unspecified											
Unspecified	Unspecified									21.0	143
Mullet, Yelloweye, *Aldrichetta forsteri*											
Fillet	Australia, retail			1.9				34.10			33
Fillet	N.Z.	76.4	20.3	1.8	1.3						153
Whole body	N.Z.	73.9	18.2	4.6	3.3						153
Mulloway, *Argyrosoma holdepidotus*											
Fillet	Australia, retail			4.4				28.70			33
Oilfish, *Ruvettus pretiosus*											
Fillet	Unspecified			14.9				1.01 WW			27
Opaleye, *Girella nigricans*											
Fresh, whole body	Japan			5.55							162
Pearlsides, Mullers, Unspecified											
Unspecified	Norway			14.68				15.2 EPA & DHA only			87
Whole	Norway		13.8	1.34	2.7			25.30			3
Whole	Norway								330.00		66
Perch											
Unspecified											
3 oz. broiled	Unspecified									70 mg	60
Perca fluviatilis											
Roe	Baltic Sea							52.00			72
Mature roe, fresh, washed	Finland	84.9	8.2	3.9	0.7						156
Roe	Baltic Sea			4.1							70
Fillet	Australia							43.50			33
Roe, washed	Archipelago Sea	84.4	8.2	4.0	0.6						92
Whole roe bags	Archipelago Sea	78.7	12.9	4.2	1.0						92
Perch, Gurnard, Family *Scorpaenidae*											
Fillet	Australia, retail							27.70			33
Perch, Ocean											
Unspecified											
Fried	Unspecified								151		131
Breaded	Retail			8.3				3.2 WW			1
Sebastes marinus											
Frozen fillet	Canada, retail	79.2	17.7	2.0	1.0		94		64		24
Fillet	Unspecified			2.5				0.72 WW			27
Fillet	Unspecified	2.5						0.74 WW			28
Edible portion	NW Atlantic			2				28.20			40

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Perch, Pacific, Unspecified											
Breaded with onion	Retail			8.3						14.1	79
Perch, Pacific Ocean, *Sebastes alutus*											
Edible flesh	NE Pacific	79.2	19.0	1.43	1.16						137
Perch, Red, Unspecified											
Muscle	European waters			1.30-7.70						21.3-54.4	1
Perch, Sea, *Helicolenus papillosus*											
Fillet, frozen	N.Z.	81.6	17.0	0.6	0.9						152
Whole body, frozen	N.Z.			1.5							152
Perch, White, *Morone americanus*											
Fresh, frozen fillet	N.Y. State	77.5	19.8	2.5	1.2				50	80	78
Fresh, frozen fillet	N.Y. State			2.5				29.80			77
Perch, Yellow, *Perca flavescens*											
Fresh, frozen fillet	N.Y. State	79.1	19.4	0.8	1.1				50	90	78
Fresh, frozen fillet, male	N.Y. State			1.15							76
Same as above but female	N.Y. State			1.01							76
Fresh, frozen fillet	N.Y. State			0.8				55.60			77
Pike, Northern, *Esox lucius*											
Fresh, frozen fillet	N.Y. State	79.8		0.7							78
Fresh, frozen fillet, male	N.Y. State			0.91							76
Same as above but female	N.Y. State			0.85							76
Fresh, frozen fillet	N.Y. State			0.7				57.10			77
Fillet	Unspecified			0.9				0.30 WW			27
Muscle:											
female	Canada	78.97	19.31	0.66							102
male	Canada	78.81	19.24	0.70							102
Pike, Pikeperch, *Lucioperca lucioperca*											
Fillet	Unspecified			1.4				0.24 WW			27
Pike, Walleye, *Stizostedion vitreum*											
Fresh, frozen fillet	N.Y. State			1.1				42.80			77
Fresh, frozen fillet	N.Y. State	78.6	19.5	1.1	1.2				50	86	78
Fresh, frozen, fillet, male	N.Y. State			1.10							76
Same as above but female	N.Y. State			1.01							76
Pilchard											
Unspecified											
Commercial oil	S. Africa							44.65			3
Canned in tomatoe sauce	S. Africa, retail	70.0	18.8	5.4		0.7	126		370		118
Sardina pilchardus											
Fillet	Unspecified			6.7				2.40 WW			27
Pilchard, S. African, *Sardinops ocellata*											
Eviscerated	Unspecified			3.8				1.16 WW			27
Whole	Unspecified			5.0							2
Plaice, Unspecified											
Raw, whole	Retail	79.5	17.9	2.2		0	91		120		118
Fried in batter	Retail	52.5	15.8	18.0		14.4	279		220		118
Dipped in egg & fried in crumbs	Unspecified	59.9	18.0	13.7		8.6	228		220		118
Steamed flesh	Unspecified	78.0	18.9	1.9		0	93		120		118
Plaice, European, *Pleuronectes platessa*											
Fillet	Unspecified			1.16-1.5							28
Pollock											
Unspecified											
Muscle	European waters			0.43-0.45						31.0-36.0	1
Edible flesh	N. America									75	1
Unspecified	Unspecified								92.6		159
Pollachius virens											
Commer. frozen fillet block	Unknown	83.1	16.2	0.03	1.2						128
Frozen fillet	Canada, retail	80.8	15.9	1.0	1.5		77		91		24
Fish sticks	Canada, retail	63.7	12.6	8.3	1.9	14.5			453		24
Fillet	Unspecified			1.0				0.45 WW			27

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Pollock, Pacific, *Theragra chalcogramma*											
Edible flesh	Bering Sea	81.5	18.9	0.98	1.34						137
Fillet	N.Z.	85.48	13.56	0.11	1.01						103
Minced	N.Z.	85.37	13.97	0.15	0.78						103
Fillets from:											
small fish	Bering Sea	83.0	16.1	0.71.1					73		141
large fish	Bering Sea	81.6	17.1	0.2	1.2				68		141
glazed block	Bering Sea	82.24	16.25	0.2	1.3				191.8		141
Fillets from:											
glazed block	Bering Sea	81.7	16.3	0.3	1.3				197		141
Fillets from: glazed block, minced	Bering Sea	83.4	13.8	0.2	1.4				218		141
Pomfret, *Pampus chinensis*											
Fillet midline, muscle/skin XS	Malaysia, retail			3.9				26.60			34
Pomfret, Silver, *Stromateus cinereus*											
Fillet	Unspecified			4.5				0.64 WW			27
Pomfret, White, *Stromateus sinensis*											
Edible meat	India			0.5				33.0			125
Pompano, Florida, *Tranchinotus carolinus*											
Fresh, frozen fillet	Fla., Atlantic	74.76	20.31	5.17	1.16			23.90	65.4		31
Above but baked	Fla., Atlantic	71.70	22.88	4.84	1.23			24.02	71.0		31
Above but broiled	Fla., Atlantic	71.41	23.88	4.19	1.38			25.75	76.4		31
Above but deepfried	Fla., Atlantic	66.18	25.38	8.78	1.47			42.88	76.6		31
Above but micowaved	Fla., Atlantic	72.72	23.23	4.21	1.30			25.61	73.1		31
Porae (Morwong), *Nemadactylus douglasi*											
Fillet	N.Z.	74.5	20.6	3.6	1.0						153
Whole body	N.Z.	66.4	19.7	9.2	4.6						153
Pout, Ocean, *Macrozoarces americanus*											
Fillet	New England	81.19	16.64	0.91	1.21					53	135
Pout, Norway											
Unspecified											
Unspecified	Norway			6.70				23.8 EPA & DHA only			87
Whole	Norway								143.25		66
Boreogadus esmarkii											
Whole	Norway			16.5	8.1	3.1		34.00			3
Sebastes marinus											
Commercial oil	Unspecified							15.10			1
Puffer, *Fugu vermiculare porphyreum*											
Liver	Japan			35.8				13.0			48
Queenfish, *Scomberoides* sp.											
Fresh, frozen fillet	NW Australia			2.0				38.10			136
Ratfish, *Hydrolagus colliei*											
Edible flesh	SE Alaska	75.3	15.1	10.7	1.6						137
Ratfish, Rabbitfish, *Chimaera monstrosa*											
Fillet	Unspecified			1.4				0.14 WW			27
Rattail, *Coelorynchus* sp.											
Fillet, frozen	N.Z.	80.3	18.5	0.5	0.9						152
Whole body, frozen	N.Z.			1.3							152
Rattail, Pacific, *Coryphaenoides acrolepsis*											
Fresh, frozen fillet	NE Pacific	84.23	14.12	0.46	1.01						80
Redfish											
Unspecified											
Flesh, iced 2 d, then frozen	Nova Scotia			2				29			74
Fresh fillet	Sydney, retail			1.8				29.3		29	121
Sebastes marinus											
Commercial oil	Unspecified							15.10			1
Sebastes viviparus (Norway Haddock)											
Fillet	Norway							TG 23.20			1
Lipids	Norway							PL 45.01			1
Ribaldo, *Mora pacifica*											
Fillet, frozen	N.Z.	80.5	17.9	0.5	0.9						152
Whole body, frozen	N.Z.			3.4							152
Ribbonfish, *Trichurus savala*											
Edible meat	India			0.7				30.7			125

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Roach, Unspecified											
Mature roe, fresh, washed	Baltic Sea	72.6	19.0	4.2	0.8						156
Roe	Baltic Sea							42.00			72
Roe	Baltic Sea			3.7							70
Rockfish											
Unspecified											
Fillet	Unspecified			1.4				0.59 WW			27
Muscle	USA							PL 56.90			1
Sebastes sp.											
Minced, unwashed flesh, iced 1 d	NE Pacific	84									86
Same as above but washed	NE Pacific	84									86
Rockfish, Black, *Sebastes melanops*											
Edible flesh	SE Alaska	81.0	18.7	1.84	1.17						137
Fillet, iced 24 h	NE Pacific	78.4	19.0	2.26	1.11				32.0		38
Same as above but freeze dried	NE Pacific		88.0 DW	10.5 DW	4.1 DW				0.15 DW		38
Rockfish, Blackmouth, *Sebastes crameri*											
Edible flesh	SE Alaska	77.1	19.8	2.19	1.23						137
Rockfish, Bocaccio, *Sebastes paucispinis*											
Edible flesh	NE Pacific	80.0	18.6	1.04	1.20						137
Rockfish, Chilipepper, *Sebastes goodei*											
Edible flesh	NE Pacific	76.5	20.8	2.35	1.10						137
Rockfish, Flag, *Sebastes rubrivinctus*											
Edible flesh	NE Pacific	78.9	18.2	1.78	1.10						137
Rockfish, Greenstriped, *Sebastes elongatus*											
Edible flesh	NE Pacific	78.5	20.3	0.73	1.21						137
Rockfish, Idiot, *Sebastolobus alascanus*											
Edible flesh	NE Pacific	80.7	17.3	1.67	1.07						137
Rockfish, Orange											
Unspecified											
Fillet, MS	Unspecified	76.94	14.50	7.66	1.62						30
Sebastes pinniger											
Edible flesh	NE Pacific	79.6	18.7	1.39	1.15						137
Fillet	Unspecified			3.1				0.98 WW			27
Fillet, iced 24 h	NE Pacific	79.6	18.2	1.84	1.04				36.5		38
Same as above but freeze dried	NE Pacific		89.3 DW	9.0 DW	5.1 DW				0.18 DW		38
Dorsal fillet, frozen	NE Pacific			3.1				38.70			40
Rockfish, Red, *Sebastes ruberrimus*											
Edible flesh	SE Alaska	51.4	17.2	0.20	1.02						137
Rockfish, Rosy, *Sebastes rosaceus*											
Edible flesh	NE Pacific	79.1	19.3	0.84	1.09						137
Rockfish, Rougheye, *Sebastes aleutianus*											
Edible flesh	SE Alaska	79.6	19.3	1.27	1.63						137
Rockfish, Spinycheek, *Sebastolobus macrochir*											
Flesh	Japan			11.9				14.2			161
Rockfish, Yellowtail											
Unspecified											
Unspecified	Unspecified								56.2		159
Fillet, MS	Unspecified	73.21	14.48	7.69	2.03						30
Sebastes flavidus											
Edible flesh	NE Pacific	79.3	18.9	1.56	1.19						137
Rockfish, Widow, *Sebastes entomelas*											
Edible flesh	SE Alaska	78.7	19.6	1.60	1.16						137
Roughy, Orange, *Hoplostethus atlanticus*											
Fresh, frozen muscle	N.Z.			3.9						22	39
Fresh, frozen roe	N.Z.			3.5						40	39
Ruff, Tommy, *Arripis georgianus*											
Fillet	Australia, retail			0.8				46.90			33
Runner, Rainbow, *Elagatis bipinnulatus*											
Fillet midline, muscle/skin XS	Malaysia, retail			1.0				42.00			34
Sablefish, *Anoplopoma fimbria*											
Edible flesh	NE Pacific	70.7	13.8	15.1	1.09						137
Fillet	Unspecified			13.1				1.64 WW			27

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Sablefish, *Anoplopoma fimbria* (continued)											
Edible portion	NE Pacific			6.4				27.40			40
Flesh	Unspecified							4.00			2
Saithe											
Unspecified											
Whole	Norway			4.83				24.5 EPA & DHA only			87
Gutted	Norway			0.47				42.0 EPA & DHA only			87
Roe	Norway			0.5				41.1 EPA & DHA only			87
Whole	Norway								103.50		66
Gutted	Norway								119.00		66
Roe	Norway								87		66
Raw	Unspecified	81.0	17.0	0.5		0	73		73		118
Steamed pieces from tail end	Unspecified	74.8	23.3	0.6		0	99		97		118
Pollachius virens											
Ripe roe, frozen	Scotland	72		15.4 DW				PL 45.40 NL 34.30		11.1 TL	146
Whole	NE Atlantic		17.3	4.8	2.7			39.50			3
Gutted	NE Atlantic		18.7	0.5	3.1			49.60			3
Salmon, Unspecified											
Unspecified	Unspecified									65.0	143
Raw	Unspecified									95.0	143
Canned	Unspecified									32.9-75.1	143
Steak	Europe			0.91						53.0	1
Flesh	N. America									35	1
Smoked, in oil	Sydney, retail			4.5				47.5		26	120
Raw	Atlantic	68.0	18.4	12.0		0	182		98		118
Steamed shoulder flesh	Unspecified	65.4	20.1	13.0		0	197		110		118
Canned	Unspecified	70.4	20.3	8.2		0	155		570		118
Smoked	Unspecified	64.9	25.4	4.5		0	142		1880		118
Muscle	N. America									95	1
Fresh, frozen fillet	N.Y. State							52.30			76
Salmon, Atlantic											
Unspecified											
Fresh	Retail			1.3				0.3 WW			1
Steak	Retail			1.5				0.35 WW			79
Salmo salar											
Fillet	Unspecified			5.8				0.51 WW			27
Fresh, frozen fillet	N.Y. State			4.0				50.60			77
Raw edible portion	Unspecified									60	84
Whole body, dried	Canada, Miramichi River	75-82	13-17	1-5							127
Salmon, Australian, *Arripis trutta*											
Fillet	Australia, retail			1.8				46.00			33
Salmon, Baltic, *Salmo salar*											
Salted fillet	Unspecified							53.61			36
Salmon, Chinook											
Oncorhynchus tshawytscha											
Edible flesh	NE Pacific	73.1	19.5	11.5	1.28						137
Fillet	Unspecified			13.2				2.49 WW			27
Canned	Unspecified			16.0				3.36 WW			27
Steak anterior to dorsal fin, frozen	NE Pacific			13.2				22.70			40
Dietary Study: wild smolts											
Whole body	NE Pacific	80	75 DW	12 DW	10 DW			NL 34.00 PL 50.00			123
hatchery-reared smolts											
Whole body	Unspecified	75	65 DW	20 DW	8 DW			NL 27.63 PL 45.87			123
Salmon, Chum, *Oncorhynchus keta*											
Edible flesh	NE Pacific	74.1	21.3	3.86	1.18						137
Fillet	Unspecified			3.9				0.76 WW			27
Steak anterior to dorsal fin, frozen	NE Pacific			3.3				33.10			40

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Salmon, Coho, Unspecified											
Canned:											
meat	"Domestic"			7.7				1.8 WW			1
liquor	"Domestic"			5.9				1.2 WW			1
Canned:											
meat	Retail			7.7				2.1 WW		41.6	79
liquor	Retail			5.9				1.4 WW		24.8	79
Oncorhynchus kisutch											
Edible flesh	NE Pacific	72.6	21.7	5.31	1.21						137
Fillet	NE Pacific			7.5				2.28 WW			27
Canned	NE Pacific			9.9				2.31 WW			27
Steak	Lake Michigan			4.8				1.28 WW			27
Fresh, frozen, whole, ground	Lake Michigan	70.8		7.3	1.9		181.8				129
Thick steak	Unspecified			7.76							28
Tail steak	Unspecified			3.41							28
Steak anterior to dorsal fin, frozen	NE Pacific			7.5				35.80			40
Unspecified	Unspecified							PL 26.50 TG 32.50			2
Salmon, Keta, Unspecified											
Canned:											
meat	"Domestic"			6.5				2.0 WW			1
liquor	"Domestic"			6.1				1.2 WW			1
Canned:											
meat	Retail			6.5						39.0	79
liquor	Retail			6.1						11.0	79
Salmon, Masu, *Oncorhynchus masou*											
Experimental fish:											
Flesh FW	Japan			2.60				NL 27.70 PL 27.57			115
Flesh SW	Japan			3.44				NL 26.02 PL 27.57			115
Wild fish	Japan							NL 24.61			115
Salmon, Pink											
Unspecified											
Canned	Unspecified								430.34		159
Canned	Unspecified									57.0	124
Canned	Unspecified								521		131
Canned:											
meat	"Domestic"			6.1				1.6 WW			1
liquor	"Domestic"			3.0				0.6 WW			1
Oncorhynchus gorbuscha											
Edible flesh	NE Pacific	75.6	19.0	4.76	1.20						137
Fillet	Unspecified			5.2				1.98 WW			27
Thick steak	Unspecified			4.3							28
Tail steak	Unspecified			2.7							28
Male:											
dark muscle			11.3								83
white muscle			1.7								83
belly			8.8								83
Female:											
dark muscle			13.7								83
white muscle			2.3								83
belly			11.3								83
Steak anterior to dorsal fin, frozen	NE Pacific			9.2				44.80			40
Eggs	NE Pacific			3.7				49.80			40
Salmon, Red, Unspecified											
Canned	Unspecified									63.8	124
Canned, 100 g	Unspecified		45 RDA				160				37
Canned in water	Sydney, retail			4.7				34.7		44	121
Canned	Unspecified								453.67		159
Salmon, Sockeye											
Unspecified											
Canned:											
meat	"Imported"			11.6				2.2 WW			1
liquor	"Imported"			18.7				3.9 WW			1

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Salmon, Sockeye (continued)											
Unspecified (continued)											
Canned:											
meat	Retail			11.6						23.2	79
liquor	Retail			18.7						43.0	79
Oncorhynchus nerka											
Edible flesh	NE Pacific	70.0	21.3	8.55	1.18						137
Fillet	Unspecified			8.9				5.10 WW			28
Canned	Unspecified			6.7				2.54 WW			27
Fillet	Unspecified			8.9				4.71 WW			27
Fresh fillet	Alaska	73.8	19.8	7.79	0.99				42.7		38
Fresh fillet but freeze dried	Alaska		75.7 DW	29.7 DW	3.77 DW				0.10 DW		38
Canned	Alaska	66.6	26.3	8.03	2.56				479.6		38
Same as above but freeze dried	Alaska		78.8 DW	24.1 DW	7.65 DW				1.44 DW		38
Anterior flesh	Japan			8.1				15.1			161
Posterior flesh	Japan			6.1				16.8			161
Ventral flesh	Japan			15.0				15.9			161
Raw edible portion	Unspecified	71.9	22.8	6.3	1.2		154		63		83
Salmon, Threadfin, *Poladactylus* sp.											
Fresh, frozen fillet	NW Australia			3.3				32.20			136
Sandeel											
Unspecified											
Whole	Norway								84		66
Unspecified	Norway			8.4				29.2 EPA & DHA only			87
Ammodytes lancea											
Ripe roe, frozen	Scotland	64		19.7 DW				PL 49.20 NL 41.60		4.7 TL	146
Sandfish, *Arctoscopus japonicus*											
Flesh	Japan			3.3				26.8			161
Sandtrout, *Cynoscion arenarius*											
Minced flesh, fresh	Gulf of Mex.	78.05	18.69	2.65	1.03						29
Minced flesh, frozen	Gulf of Mex.	78.25	17.50	2.00	0.95						29
Minced flesh	Gulf of Mex.							22.0			29
Sand Lance, American, *Ammodytes americanus*											
Whole	Unspecified			7.2				1.57 WW			27
Sardine											
Unspecified											
Canned, in tomatoe sauce	Unspecified									40.6	124
Unspecified	Unspecified									68.4-141.0	143
Canned in oil	N. America			11.1						140	1
Commercial oil	Portugal							38.75			3
Canned:											
meat	"Imported"			21.9				3.6 WW			1
liquor	"Imported"			94.5				15.4 WW			1
In oil	Sydney, retail			12.5				16.7		145	120
Canned in oil, drained	Unspecified	58.4	23.7	13.6		0	217		650		118
Canned in oil, undrained	Unspecified	48.5	19.7	28.5		0	334		540		118
Canned in tomatoe sauce	Unspecified	65.0	17.8	11.6		0.5	177		700		118
Sardinella fimbriata											
Fillet midline muscle/skin XS	Malaysia, retail			2.0				39.5			34
Sardinella longiceps											
Oil	Unspecified							38.00		370	132
Sardinops melanosticta											
Flesh	Japan			7.02				NL 25.69 PL 31.32			49
Sardine, Spanish, *Sardinella aurita*											
Raw	Florida	75.41	20.09	3.22	1.75			42.9			45
Canned	Florida	69.63	24.52	4.21	1.90			43.25			45
Raw, headed, gutted	Florida			1.3							45
Canned in 2% brine	Florida			2.05							45

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Sardine, Spanish, *Sardinella aurita* (continued)											
Canned in soybean oil	Florida			9.64							45
Headed, gutted, frozen	Fla., Altantic	76.05	20.83	1.79	2.68						44
Headed, gutted, frozen	Gulf of Mex.	74.73	20.90	2.42	2.69						44
Fillet	Fla., Altantic	75.86	22.40	1.31	1.77						44
Whole	Fla., Altantic	76.99	18.59	1.84	4.08						44
Unspecified	Unspecified							45.6			44
Scad, *Decapterus muroadsi*											
Fillet	Unspecified			2.4				0.71 WW[1]			27
Scad, Black Sea, *T. med. pont*											
Light meat	Unspecified			4.9							2
Dark meat	Unspecified			10.5							2
Scad, Round											
Decapterus punctatus											
Headed, gutted, frozen	Fla., Atlantic	74.06	21.64	2.52	3.12						44
Headed, gutted, frozen	Gulf of Mex.	73.95	22.60	2.60	2.60						44
Whole	Fla., Atlantic	74.18	20.03	2.96	3.89						44
Fillet	Fla., Atlantic	75.71	22.22	1.90	1.42						44
Unspecified	Unspecified							43.3			44
Decapterus russelli											
Fillet midline, muscle/skin XS	Malaysia, retail			2.1				51.40			34
Scad, Yellow, *Selaroides leptolepsis*											
Fillet midline, muscle/skin XS	Malaysia, retail			2.9				29.20			34
Scad, Yellowtail, *Caranx djeddaba*											
Fillet midline, muscle/skin XS	Malaysia, retail			1.4				43.70			34
Sculpin, Deepwater, *Myoxocephalus quadricornis*											
Fresh, frozen, whole, ground	Lake Michigan	77.6		5.4	2.6		129.5				129
Sculpin, Slimy, *Cottus cognatus*											
Fresh, frozen, whole, ground	Lake Michigan	76.2		5.3	2.6		137.2				129
Scup, *Stenotomous chrysops*											
Fresh, edible portion, iced < 1 d	New England	77.65	17.51	3.97	1.46				21.11	37.69	64
Sea Bass, *Centropristes striatus*											
Edible, raw, skinned portion, iced 2 d	Virginia, retail	79.80	18.46	2.08	1.09				55.6		8
Same as above but cooked	Virginia, retail	74.17	26.14	1.56	1.42				49.4		8
Sea Bass, Japanese, *Lateolabrax japonicus*											
Fillet	Unspecified			2.8				1.07 WW			27
Sea Bream, *Pagrus major*											
Liver	Japan, retail									427	61
Sea Bream, Black, *Mylio macrocephalus*											
Fresh, whole body, hatchery-reared	Japan			3.85							162
Sea Bream, Red, *Chrysophrys major*											
Fresh, whole body	Japan			3.8							162
Sea Pike, Giant, *Pshyraena jello*											
Fillet, midline, muscle/skin XS	Malaysia, retail			0.8				46.10			34
Sea Pike, Shortnecked, *Sphyraena langsar*											
Fresh muscle	India			1.51				28.96			149
Sea Trout, Gray, *Cynoscion nobilis*											
Edible, raw, skinned portion, iced < 2 d	Virginia, retail	76.98	18.62	3.41	1.13				40.9		8
Same as above but cooked retail	Virginia, retail	71.38	24.16	4.41	1.40				45.4		8
Sea Trout, Silver, *Cynoscion nothus*											
Minced	Gulf of Mex.	80.38	17.95	0.56	1.10						103
Shad, American, *Alosa sapidissima*											
Edible flesh	NE Pacific	71.4	18.8	7.9	1.48						137
Fillet, iced 24 h	NE Pacific	65.8	20.8	13.00	1.49				48.9		38
Same as above but freeze dried	NE Pacific		60.7 DW	38.1 DW	4.4 DW				0.15 DW		38

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Shad, Gizzard, *Anodontostoma chacunda*											
Fillet midline, muscle/skin XS	Malaysia, retail			2.7				22.80			34
Edible flesh	India		2.25					21.5			125
Shark, *Carcharias taurus* & *Sphyrna diplana*											
Liver oil	Lagos	46.75		32.42				33.40			10
Shark, Basking, Unspecified											
Meat	Norway								250		66
Meat	Norway			6.3				16.8 EPA & DHA only			87
Shark, Salmon, *Lamna ditropis*											
Dorsal flesh	Unspecified			1.9				0.81 WW			27
Shark, School, *Galeorhinus australis*											
Fillet	Australia, retail			1.1				47.10			33
Sheepshead, (Drum)											
Aplodinotus grunniens											
Commercial oil from whole fish	Commercial			11.9						6.9 mg TL	6
Archosargus probatocephalus											
Minced flesh, fresh	Gulf of Mex.	79.62	14.65	3.21	1.15						29
Minced flesh, frozen	Gulf of Mex.	78.62	14.63	3.20	0.84						29
Minced flesh	Gulf of Mex.							30.1			29
Skate											
Unspecified											
Fried in batter	Retail	61.8	17.9	12.1		4.9	199		140		118
Raja sp.											
Edible flesh	Unknown	81.8	16.3	6.05	1.68						137
Skate (Short noseray), *Rhinobatos granulatus*											
Edible meat	India			0.6				29.3			125
Smelt, *Osmerus dentex*											
Whole	Japan									98.8 TS	145
Smelt, American, *Osmerus mordax*											
Fresh, frozen fillet	N.Y. State	77.8	18.3	2.2	1.2				60	70	78
Fresh, frozen fillet	N.Y. State			2.2				50.20			77
Breaded	Canada, retail	58.1	13.8	10.8	1.6		220		379		24
Eviscerated	Unspecified			1.7				0.51 WW			27
Fresh frozen, whole, ground	Lake Michigan	74.6		6.6	1.8		159.0				129
Smelt, Longfin, *Spirinchus lanceolatus*											
Flesh	Japan			9.9				16.1			161
Smelt, Pond, *Hypomesus olidus*											
Dorsal flesh	Unspecified			0.73				0.27			27
Whole body	Japan			4.3				29.6			161
Smelt, Silver Great, Unspecified											
Whole	Norway								145.33		66
Unspecified	Norway							14.9 EPA & DHA only			87
Smelt, Surf, *Hypomesus japonicus*											
Flesh	Japan			1.2				30.5			161
Smelt, Sweet, *Plecoglossus altivelis*											
Dorsal flesh	Unspecified			2.8				0.50 WW			27
Flesh	Japan			4.8				21.5			161
Flesh	Japan:										
	Sea of Himi			1.7				TG 37.8 PL 52.2			114
	Lake Biwa			2.4				TG 32.9 PL 10.3			114
	River Jinzu			Male 3.17 Female 3.32				TG 24.3 PL 35.2			114
Snake Head, Green FW, *Ophiocephalus punctatus*											
Fresh muscle	India			0.77				29.92			149
Snapper											
Unspecified											
Raw	Unspecified								66		131
Chrysophrys auratus											
Fillet	Australia, retail			2.1				31.00			33
Skinned fillet	N.Z.	75.9	20.9	1.94	1.46			12.30	85		47

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Snapper, Golden, *Lutianus fulviflamma*											
Fresh muscle	India			0.84				24.39			149
Snapper, Red											
Lutjanus sp.											
Fresh, frozen fillet	NW Australia			1.4				47.80			136
Lutjanus campechanus											
Fresh, frozen, fillet	Fla., Atlantic	77.02	19.83	1.50	1.22			42.04	53.3		31
Above but baked	Fla., Atlantic	73.22	24.01	1.31	1.26			44.44	52.0		31
Above but broiled	Fla., Atlantic	71.97	25.31	1.75	1.37			44.89	58.8		31
Above but deep fried	Fla., Atlantic	68.46	26.10	5.49	1.45			56.14	61.2		31
Above but microwaved	Fla., Atlantic	73.87	24.07	1.65	1.34			43.28	56.4		31
Fillet	Unspecified			1.2				0.42 WW			27
Trachichthodes gerrardi											
Fillet	Australia, retail			0.8				49.30			33
Snapper, Waigue, *Lutianus waigiensis*											
Fresh muscle	India			3.13				19.00			149
Snook, *Australuzza novaehollandiae*											
Fillet	Australia, retail			0.9				50.70			33
Sole, Unspecified											
Muscle	European waters			0.60-2.10						41.5-58.5	1
Unspecified	Japan			0.99						51	1
Sole, Atlantic spp., Unspecified											
Frozen, fillet	Canada, retail	83.3	14.9	1.06	1.1		73		92		24
Fish sticks	Canada, retail	63.2	10.6	9.9	2.0	14.3			554		24
Sole, Dover											
Unspecified											
Unspecified	Unspecified								139		159
Microstomus pacificus											
Edible flesh	NE Pacific	85.4	16.8	0.95	1.11						137
Fillet iced 24 h	NE Pacific	84.4	14.7	0.81	0.93				75.0		38
Same as above but freeze dried	NE Pacific		94.4 DW	5.2 DW	6.0 DW				0.48 DW		38
Sole, Dover Japanese, *Microstomus achne*											
Flesh, frozen	Japan			2.3				23.3			54
Sole, English											
Unspecified											
Fillet, MS	Unspecified	83.44	11.84	2.28	2.14						30
Parophyrus vetulus											
Edible flesh	NE Pacific	81.4	16.8	1.36	1.12						137
Fillet, iced 24 h	NE Pacific	81.9	16.1	1.40	0.99				49.8		38
Same as above but freeze dried	NE Pacific		89.0 DW	7.8 DW	6.0 DW				0.28 DW		38
Sole, Flathead											
Hippoglossoides elassodon											
Edible flesh	NE Pacific	81.0	19.2	1.10	1.13						137
Hippoglossoides dubius											
Flesh, frozen	Japan			1.9				27.5			54
Sole, Lemon											
Unspecified											
Raw	Unspecified	81.2	17.1	1.4		0	81		95		118
Headed, boned, fried in crumbs	Unspecified	60.5	16.1	13.0		9.3	216		140		118
Steamed flesh	Unspecified	77.2	20.6	0.9		0	91		120		118
Microstomus kitt											
Fillet	Unspecified			0.78				0.27 WW			27
Sole, Malabar, *Cynoglossus semifasciatus*											
Fillet	Unspecified			2.0				0.18 WW			27
Sole, Petrale											
Unspecified											
Fillet, MS	Unspecified	77.12	13.52	8.16	1.34						30
Eopsetta jordani											
Edible flesh	NE Pacific	80.0	17.6	0.80	1.19						137
Fillet, iced 24 h	NE Pacific	79.3	18.8	1.41	1.05				46.4		38
Same as above but freeze dried	NE Pacific		91.0 DW	6.8 DW	5.1 DW				0.23 DW		38
Sole, Rex, *Glyptocephalus zachirus*											
Edible flesh	NE Pacific	82.3	16.7	0.71	1.10						137

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Sole, Rex Japanese, *Glyptocephalus stelleri*											
Flesh, frozen	Japan			1.2				19.5			54
Sole, Rock, *Lepidopsetta bilineata*											
Edible flesh	NE Pacific	80.7	19.2	0.77	1.15						137
Sole, Roughscale, *Clidoderma asperrimum*											
Flesh, frozen	Japan			5.6				21.8			54
Sole, Sand, *Psettichthys melanostictus*											
Edible flesh	Puget Sound	83.4	16.1	0.44	1.07						137
Sole, Yellowfin, *Limanda aspera*											
Edible flesh	Bering Sea	82.66	17.0	1.25	1.46						137
Spadefish, *Chaetodipterus faber*											
Liver oil	S. Carolina							15 WW			119
Spot, *Leiostomus xanthurus*											
Edible, skinned portion, iced < 2 d	Virginia, retail	70.23	19.70	10.24	1.20				28.6		8
Same as above but cooked	Virginia, retail	71.38	24.16	4.41	1.40				45.4		8
Blocks, frozen, stored 1 yr:											
fillet	N. Carolina, retail	75.84	18.76	5.27	1.01			24.68			157
mince	N. Carolina, retail	76.21	18.29	5.24	1.05			23.72			157
Minced	Gulf of Mex.	73.86	17.97	6.04	1.15						103
Spot, Pearl FW, *Etroplus suratensis*											
Fresh muscle	India			2.30				21.87			149
Minced fillet	India	75.29	22.50	2.378	0.9426	717.5 mg	117.3		126.9		106
Sprat											
Unspecified											
Unspecified	Norway			11.75				19.0 EPA & DHA only			87
In oil	Sydney, retail			9.9				25.7		251	120
Whole	Norway								304.33		66
Deep fat fried	Unspecified	33.7	24.9	37.9		0	441		130		118
Clupea sprattus											
Whole	Unspecified			13.5				2.18 WW			27
Fillet	Unspecified			5.1				1.20 WW			27
Stingray, *Dasyatus zugei*											
Fillet midline, muscle/skin XS	Malaysia, retail			0.6				40.80			34
Sturgeon											
Acipenser baeri											
Dorsal meat	Japan			7-14							5
Ventral meat	Japan			71-76							5
Liver	Japan			38-41							5
Acipenser shrenki											
Liver	Japan	41									5
Sturgeon, Atlantic, *Acipenser oxyrhynchus*											
Whole steak section	NW Atlantic							44.8			5
White subdermal layer	NW Atlantic							28.1			5
Muscle	NW Atlantic							45.4			5
Orange tissue	NW Atlantic							29.2-42.8			5
Sturgeon, Common, *Acipenser sturio*											
Fillet	Unspecified			3.3				0.30 WW			27
Sturgeon, Russian, *Acipenser guldenstadti*											
Fillet	Unspecified			10.6				2.78 WW			27
Sucker, *Catostomus catostomus*											
Minced flesh, MD, summer harvest	Lake Michigan	76.8	17.3	5.9							105
Sucker, White FW, *Catostomus commersonni*											
Fresh, frozen fillet	N.Y. State	79.20		1.48				0.50 WW		36	99
Above but baked	N.Y. State	75.8			2.53			0.97 WW		34	99
Above but pan fried	N.Y. State	59.0		6.22				2.70 WW		22	99
Above but deep fried	N.Y. State	69.3		6.22				2.71 WW		34	99
Fresh, frozen:											
dark muscle	N.Y. State	75.61		6.23				31.94			97
white muscle	N.Y. State	78.43		Dorsal 1.26 Ventral 1.64				Dorsal 41.92 Ventral 39.49			97
Fresh, frozen fillet	N.Y. State	77.94		2.99							97
Fresh, frozen fillet	N.Y. State	78.6	16.9	1.9	1.2				40	63	78
Fresh, frozen fillet	N.Y. State			1.9				39.80			77

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Sucker, White FW, *Catostomus commersonni* (continued)											
Fresh, minced, MD, edible portion	N.Y. State	82.7		1.5				41.7			96
Fresh fillet	N.Y. State	80.8		1.6				38.9			96
Minced fillet, MD:											
summer harvest	Lake Huron	75.3	17.1	4.9							105
winter harvest	Lake Huron	79.7	15.45	2.75							105
Dark muscle	Unspecified			6.2							83
White muscle	Unspecified			1.4							83
Sunfish, Pumpkinseed, *Lepomis gibbosus*											
Fresh, frozen fillet	N.Y. State	79.5	19.4	0.7	1.1				80	67	78
Fresh, frozen fillet	N.Y. State			0.7				48.20			77
Swordfish, *Xiphias gladius*											
Raw edible portion										60	84
Tarakihi, *Cheilodactylus macropterus*											
Skinned fillet	N.Z.	75.4	20.3	3.90	1.43			46.40	101		47
Skin on fillet	N.Z.	74.6	21.2	5.12	1.29				104		47
Teleost Fish:											
Beryx splendens											
Fresh, frozen fillet	N.Z.							20.5			56
Centrolophus sp.											
Fresh, frozen flesh	N.Z.			21.0							56
Congridae sp.											
Fresh, frozen flesh	N.Z.							NL 26.7			56
Cubiceps gracilis											
Fresh, frozen flesh	N.Z.			18.9							56
Epigonas sp.											
Fresh, frozen flesh	N.Z.							NL 16.1			56
H. gilchristi											
Muscle	Unspecified			7.9				By lipid class			51
Hoplostethus atlanticus											
Fresh, frozen muscle	N.Z.			4.5				By lipid class			51
Macruronus novaezelandidae											
Fresh, frozen fillet	N.Z.							21.9			56
Seriollela sp.											
Fresh, frozen flesh	N.Z.			13.8				NL 8.9 PL 23.7			56
Seriollela maculatus											
Fresh, frozen flesh	N.Z.			15.2							56
Seriollela punctata											
Fresh, frozen flesh	N.Z.			11.5				NL 15.7 PL 23.7			56
Stromateus maculatus											
Fresh, frozen flesh	N.Z.			20.1							56
Threadfin, *Eleutheronema tetradactylum*											
Fillet midline, muscle/skin XS	Malaysia, retail			0.9				47.00			34
Tilapia hybrid cross, *S. aureus* × *S. niloticus*											
Body:											
manure fed	Israel	73.63	16.47	6.33	3.63			24.00			148
pellet fed	Israel	71.2	17.6	8.1	3.6			23.25			148
pellet & oil fed	Israel	69.2	17.5	8.7	3.4			24.35			148
Tilapia, *Tilapia* sp.											
Minced flesh, fresh	Gulf of Mex.	81.80	14.81	2.50	0.75						29
Minced flesh, frozen	Gulf of Mex.	80.80	15.69	3.40	0.79						29
Torpedofish, *Megalaspis cordyla*											
Fillet, midline, muscle/skin XS	Malaysia, retail			1.2				47.50			34
Trevally (Skippy), *Carangoides* sp.											
Fresh, frozen fillet	NW Australia			2.0				45.10			136
Trevally											
Caranx sp.											
Fresh, frozen fillet	NW Australia			1.8				55.90			136
Caranx georgianus											
Skinned fillet	N.Z.	75.0	21.5	2.64	1 34			39.90	74		47
Caranx malabaricus											
Fillet midline, muscle/skin XS	Malaysia, retail			1.4				27.80			34

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Trout											
Unspecified											
Unspecified	Unspecified								2		
									9.3		159
Unspecified	Unspecified									50.0-57.0	143
Commercial oil	Unspecified							26.20			1
Flesh	N. America			11.4						55	1
S. iridis											
Muscle	Unspecified			5.3							2
Trout, Brook, *Salvelinus fontinalis*											
Fresh, frozen fillet	N.Y. State	74.3	21.5	3.4	1.3				60	68	78
Fresh, frozen fillet	N.Y. State			3.4				37.60			77
Eviscerated	Unspecified			7.7				1.04 WW			27
Eggs & fry	Artificially spawned							39.5-44.4			9
Trout, Brown, Unspecified											
Steamed flesh	Unspecified	70.6	23.5	4.5		0	135		88		118
Trout, Cutthroat, *Salmo clarki*											
Edible flesh	Prince Edward Island, Alaska	78.2	19.9	1.8	1.4						137
Trout, Dolly Varden, *Salvelinus malma*											
Edible flesh	Lake on island in Bristol Bay	74.1	19.8	5.4	1.2						137
Trout, Lake											
Unspecified											
Raw	Unspecified								79		131
Salvelinus namaycush											
Fresh, frozen:											
combined fillet	N.Y. State	70.90		7.65				2.77 WW		50	99
anterior fillet	N.Y. State			11.40							99
posterior fillet	N.Y. State			6.66							99
Fresh, frozen baked	N.Y. State	65.8		5.63				5.11 WW		40	99
Same as above but pan fried	N.Y. State	60.4		9.46				8.39 WW		62	99
Same as above but deep fried	N.Y. State	60.0		7.64				6.81 WW		51	99
Fresh, frozen fillet	N.Y. State	72.4	18.6	7.2	1.1				50	51	78
Fresh, frozen fillet	N.Y. State			7.2				36.00			77
Fresh, frozen, whole, ground	Lake Michigan	64.6		16.4	1.8		245.8				129
Trout, Rainbow											
Salmo gairdneri											
Fresh, frozen roe	Fish farm			8.8						2.4 TL	69
Fresh, frozen fillet	N.Y. State	76.9	18.8	3.1	1.3				30	50	78
Fresh, frozen fillet	N.Y. State			3.1				53.00			77
Whole	Japan									99.7 TS	145
Mature roe, fresh, unwashed	Hatchery stock, Finland	63.1	26.6	7.6	1.7						156
Same as above, but washed	Hatchery stock, Finland	63.7	27.4	7.1	1.5						156
Roe	Hatchery stock, Finland							43.30			72
Roe	Hatchery stock, Finland			9.2							70
Edible flesh	SE Alaska	68.9	21.1	9.02	1.31						137
Raw edible portion	Unspecified	76.9	18.8	3.1	1.3						83
Whole fillet	Unspecified			2.5				42.90			40
Fresh whole body	Japan			5.60							162
Fillet	U.S.A.			4.5				1.38 WW			27
Fillet	Europe			4.5				0.72 WW			27
Eviscerated	Europe			7.0				1.76 WW			27
Fillet	Japan			3.8				1.30 WW			27
Eviscerated	Japan			7.5				0.91 WW			27
Hatchery-reared:											
whole	Hatchery stock, France			7.27							20
muscle	Hatchery stock, France			3.9							20

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Trout, Rainbow, *salmo gairdneri* (continued)											
Dietary experiment:											
whole, juveniles	Unspecified							By lipid class			17
whole, juveniles	NE Pacific							NL 43.0 PL 49.9			16
livers:											
control	Scotland			10 DW				34.40			57
krill fed	Scotland			20 DW				30.10			57
copepod fed	Scotland			25 DW				41.10			57
Starvation experiment:											
muscle:											
control	Arizona			2.7				20			62
starved	Arizona		1.7-2.3					16-18			62
whole body:											
control	Arizona			4.3				25			62
starved	Arizona			0.9				30-38			62
Tullibee, *Coregonus artedii*											
Commercial fish oil from whole fish	Unspecified			8.0						8.8 mg TL	6
Tuna											
Unspecified											
Unspecified	Unspecified									52.0-72.2	143
Spread	Unspecified								329		131
Flesh, iced 2 d, then frozen	Nova Scotia			14				22			74
Canned in oil, drained	N. America			8.2						65	1
Canned in water, not drained	N. America			0.8					63		1
Canned in water, drained, chunk light	Unspecified								362		147
Canned	Unspecified									38.0	124
Canned, chunks	Unspecified									14.6	124
Canned:											
water pack	Retail								461		159
oil pack	Retail								382		159
dietetic	Retail								43.0		159
Canned in water	Unspecified		28	0.79		0	127.1			63	112
In oil	Sydney, retail			7.1				61.4		92	120
Euthynnus affinis											
Red meat	India, retail	69.37	18.28	4.631	1.224	0.750	120		53.74		107
White meat	India, retail	70.94	18.90	3.056	1.704	0.263	104		47.50		107
Thunus obesus											
Meat	Unspecified									0.12 TL	68
Tuna, Albacore											
Unspecified											
Canned:											
meat	"Imported"			8.3							1
liquor	"Imported"			73.3				33.9 WW			1
Canned:											
meat	Retail			8.3				3.1 WW			79
liquor	Retail			87.8				35.0 WW			79
Dark muscle	Japan			3.72						53	1
Thunnus alalunga											
Light meat	NE Pacific	64.9	25.0	10.3	1.26						137
Dark meat	NE Pacific	68.6	22.8	8.25	1.18						137
Total	Pacific							44.40			2
White meat	Unspecified			8.0				3.02 WW			28
Canned, salt added	NE Pacific	70.3	28.1	1.23	1.49				370.4		38
Same as above but freeze dried	NE Pacific		94.5 DW	4.1 DW	5.0 DW				1.25 DW		38
White meat	Unspecified			8.0				3.00 WW			27
Canned light meat	Unspecified		6.8					1.81 WW			27
Tuna, Bluefin, *Thunnus thynnus*											
Fillet	Unspecified			4.7				1.40 WW			27
Canned light meat	Unspecified	4.6						1.17 WW			27
Tuna, Bonito, Unspecified											
Unspecified	Japan			1.96						500	1

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Tuna, Skipjack											
Unspecified											
Canned:											
meat	"Domestic"			6.5				3.1 WW			1
liquor	"Domestic"			24.5				12.9 WW			1
Canned:											
meat	Retail			6.5				3.25 WW		17.6	79
liquor	Retail			24.5				14.55 WW		31.4 WW	79
Canned in oil	Unspecified	54.6	22.8	22.0		0	289		420		118
Euthynnus pelamis											
Fillet	Unspecified			0.9				0.20 WW			27
Canned light meat	Unspecified			0.8				0.24 WW			27
Katsuwonus pelamis											
Muscle	Japan			0.57-0.86							111
Dorsal muscle:											
entire muscle	Japan			1.66							110
external muscle	Japan			1.34				48.2			110
internal muscle	Japan			0.53				53.5			110
Ventral muscle:											
entire muscle	Japan			1.75							110
external muscle	Japan			1.59							110
internal muscle	Japan			0.62							110
Tuna, Slender, *Allothunnus fallai*											
Frozen:											
dorsal meat	Australia			14.95				37.7			12
ventral meat	Australia	28.95						32.7			12
liver oil	Australia			13.05				39.8			12
Fillet, frozen	N.Z.	54.7	19.8	24.1	1.4						154
Tuna, Yellowfin											
Unspecified											
Canned:											
meat	"Domestic"			6.5				3.1 WW			1
liquor	"Domestic"			25.5				13.7 WW			1
Canned:											
meat	Retail			6.5				3.15 WW			79
liquor	Retail			25.5				13.7 WW			79
Thunnus albacares											
Fillet	Unspecified			1.4				0.47 WW			27
Canned light meat	Unspecified	0.6						2.21 WW			27
Brine pack	Unspecified			1.38							28
Oil pack	Unspecified			14.49							28
Turbot, *Scophthalmus maximus*											
Fillet	Australia, retail			4.5				21.60			33
Dietary Study:											
Extrahepatic tissues	Wales							Diet dependant			19
Turbot, Greenland, *Reinhardtius hippoglossoides*											
Commercially frozen fillet block	Retail	72.3	14.7	12.8	1.1						128
Frozen fillet	Canada, retail	70.4	15.0	13.7	1.0		187		80		24
Fillet	Unspecified			8.4				0.73 WW			27
Warehou, Blue, *Seriolella brama*											
Fillet, frozen:											
female	N.Z.	74	21.0	4.3	1.3			19.00	45		122
male	N.Z.	75	20.0	3.2	1.3			26.90	55		122
Warehou, Silver, *Seriolella punctata*											
Fillet, frozen:											
female	N.Z.	66	8.5	16.2	1.2			24.50	45		122
male	N.Z.	68	20.0	12.5	1.2			29.30	55		122
Whitebait, Unspecified											
Whole fish fried with flour	Unspecified	23.5	19.5	47.5		5.3	525		230		118
Whitefish											
Unspecified											
Muscle	European waters			0.46-0.53						40.0-50.0	1
Raw	NE Pacific		17.2	1.5		0	80		52	30	37
Roe	Baltic Sea			9.8							70
Coregonus albula											
Fresh frozen roe	Finland Sea			8.7						1.3 TL	69

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Whitefish (continued)											
Unspecified (continued)											
Mature roe, fresh, washed	Finland Sea	69.3	18.7	9.9	1.0						156
Roe, frozen	Finland			9.8				50.00		1.4 TL	67
Fillet, frozen	Finland			3.0				53.40			67
Flesh lipids	Finland							44.2			71
Roe	Finland							53.20			72
Coregonus artedii											
Flesh lipids	Finland							35.4			71
Whitefish, Lake, *Coregonus clupeaformis*											
Fresh, frozen muscle	NW Atlantic	77.67	21.18	1.17	1.29						11
Fresh, frozen ovary	NW Atlantic	74.35	15.81	9.05	1.08						11
Fillet	Unspecified			5.2				1.54 WW			27
Fresh, frozen, whole, ground	Lake Michigan	58.8		22.4	1.7		219.9				129
Whole fillet	Unspecified			2.2				35.70			40
Whiting											
Unspecified											
Unspecified	Unspecified									20.5-88.2	143
Fresh fillet	Sydney, retail			0.5				45.7		28	121
Headed, boned, fried in crumbs	Unspecified	63.0	16.3	9.3		6.3	173		180		118
Steamed flesh	Unspecified	76.9	20.9	0.9		0	92		130		118
Merlangus merlangus											
Ripe roe, frozen	Scotland	85		10.6 DW				PL 48.40 NL 43.70		11.7 TL	146
Sillago sihama											
Fillet midline, muscle/skin XS	Malaysia, retail			1.0				44.40			34
Whiting, Atlantic, *Merluccius bilinearis*											
Fresh, edible portion, iced < 1 d	New England	82.18	15.78	1.67	0.86				15.75	18.80	64
Fillet	Unspecified			3.8				1.36 WW			28
Whiting, Blue											
Unspecified											
Unspecified	Norway			4.87				24.5 EPA & DHA only			87
Gutted	Norway			0.70				38.5 EPA & DHA only			87
Whole	Norway								176.67		66
Gutted	Norway								58.50		66
Micromestius pontassou											
Whole	NE Atlantic		17.2	4.9	3.1			35.30			3
Whiting, King George, *Sillaginodes puctratus*											
Fillet	Australia, retail			1.0				45.10			33
Whiting, Pacific, Unspecified											
Unspecified	"Ocean"								61.4		159
Unspecified	"Inside"								101		159
Whiting, Sand											
Sillago sp.											
Fresh, frozen fillet	NW Australia			1.2				52.90			136
Sillago ciliata											
Fillet	Australia, retail			1.0				29.90			33
Whiting, Yellowfin, *Sillago schomburgkii*											
Fillet	Australia, retail			1.0				47.20			33
Wolffish, Atlantic, *Anarhichas lupus*											
Fillet	Unspecified			3.0				1.01 WW			27
Wrasse											
Labrus bergylta											
Fillet	Europe			2.0				0.51 WW			27
T. duperreyi											
Muscle	Unspecified			0.5-1.0							2
Wrasse, Ballan, Unspecified											
Unspecified	Norway			3.85				20.5 EPA & DHA only			87
Whole	Norway							66	130.50		
Yellowtail, *Seriola dorsalis*											
Fillet	Unspecified			5.4				0.05 WW			27

Table 1—Finfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
No common names provided:											
Allolepsis hollandi											
Flesh	Japan			2.0				18.9			53
Aptocyclus ventricosus											
Flesh	Japan			1.6-3.2				11.1-12.6			53
Arctoscopus japonicus											
Flesh	Japan			2.6				15.9			53
Bothrocara mollis											
Flesh	Japan			0.4				24.8			53
Careproctus segaliensis											
Flesh	Japan			0.6				36.3-38.1			53
Clidoderma asperrimum											
Flesh	Japan			2.8				22.4			53
Liparis tanakai											
Flesh	Japan			0.6				35.8			53
Lotella maximowiezi											
Flesh	Japan			0.3				34.0			52
Lumpenella nigricans											
Flesh	Japan			1.6				21.2			53
Lycodes nakamurai											
Flesh	Japan			1.4				22.9			53
Lycodes tanakai											
Flesh	Japan			4.7				16.2			53
Malacocottus gibber											
Flesh	Japan			1.7				21.5			53
Nematonurus pectoralis											
Flesh	Japan			0.2				30.2			52
Notacanthus fascidens											
Flesh	Japan			9.7							53
Podonema longipes											
Flesh	Japan			0.7				32.5			52
Podothecus sachi											
Flesh	Japan			8.5				17.3			53
Priacanthus boops											
Flesh	Japan			3.6				18.5			53
Sebastes baramenuke											
Flesh	Japan			2.0				8.1			53
Synaphobranchus kaupii											
Flesh	Japan							11.0			53

Table 2—Shellfish.

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Abalone											
Unspecified											
Unspecified	Japan			0.66						121	163
Flesh	Sydney, retail			0.9				26.5		105	213
Haliotus sp.											
Edible portion	SE Alaska	76.9	17.1	0.7	1.7						219
Haliotus discus hannai											
Muscle	Japan	72-78	7.5-12.5	1.0-1.5	1.2-2.5	0.1-0.5					210
H. gigantea											
Muscle	Japan	76	0.4	1.5	2.3						210
H. gigantea (Gmelin)											
Muscle	Japan	75-82	9.4	0.2-0.45	1.5						210
H. gigantea discus											
Muscle	Japan	84.0									210
H. gigantea nordatis											
Muscle	Korea	76	20	0.4	2.8	0.4					210
H. gigantea sieboldii											
Muscle	Japan	80.5									210
H. japonica Reeve											
Muscle	Japan	76	10.2	0.3	1.35	7.0					210
H. ruber											
Muscle	Australia	74-78									210
Abalone, Black, *Haliotus cracherodi*											
Edible portion	Unspecified									160	197
Muscle	USA	68-72	18-23	0.75-3.0	3.4	1.5-7.5					210
Abalone, New Zealand, *Haliotus iris*											
Foot muscle	Unspecified			1.0				0.32 WW			178
Abalone, South African, *Haliotus midae*											
Foot muscle	Unspecified			1.1				0.32 WW			178
Total flesh	Unspecified			1.1							164
Clam											
Unspecified											
Unspecified	Unspecified									42-122	221
Meat	N. America			1.6						50	163
In water	Sydney, retail			3.5				35.6		79	213
Codakia orbicularis											
Fresh meat	Bahamas	74.8		1.1	2.9			19.5		20.6	169
Mercenaria mercenaria											
Raw edible flesh	Virginia, retail	81.68	9.70	1.18	1.52				55.8		167
Cooked edible flesh	Virginia, retail	69.00	15.44	1.61	2.15				57.4		167
Tapes japonica											
Raw flesh	Unspecified	84.9	9.2	1.7	1.2	1.8					206
Seasoned, retort pouched	Unspecified	50.9	26.3	4.6	3.7	6.1					206
Clam, Ark Shell, *Arca noae*											
Edible portion	Unspecified			1.5				0.54 WW			178
Clam, Butter											
Saxidomus giganteus											
Edible portion	NE Pacific									39.9	183
Saxidomus nuttalli											
Edible portion	SE Alaska	80.0	13.0	1.23	1.7						219
Clam, Geoduck, *Panope generosa*											
Unspecified	NE Pacific									31.2	183
Syphon	NE Pacific	77.2	15.9	0.8	4.6						219
Body	NE Pacific	78.8	15.0	3.2	1.8						219
Clam, Horse, *Tresus capax*											
Unspecified	NE Pacific									42.4	183
Clam, Japanese FW, *Corbicula japonica*											
Flesh	Unspecified			0.89				0.29 WW			178
Clam, Littleneck											
Protothaca staminea											
Edible portion	SE Alaska	79.4	13.5	1.0	2.6						219
Whole body	Unspecified			0.5				37.5			186
Venerupis staminea											
Unspecified	NE Pacific									35.7	183

Table 2—Shellfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Clam, Razor, *Siliqua patula*											
Edible portion	NE Pacific									19.8	183
Clam, Shortnecked, *Tapes philippinarum*											
Unspecified	Japan			0.67-1.55						32.7-42.8	193
Clam, Softshell, *Mya arenaria*											
Cooked meat	NW Atlantic									40	198
Clam, Steamer, Unspecified											
Cooked meat	Unspecified									35	197
Clam, Surf, *Spisula solidissima*											
Cooked meat:											
cultured, 60mm	NW Atlantic	74.3		2.6	1.2			41.8		77.9	202
natural, 60mm	NW Atlantic	74.0		1.3	2.6			30.8		67.8	202
natural, 120mm	NW Atlantic	73.4		1.4	2.8			41.7		63.4	202
Cooked meat	Unspecified									50	198
Clam, Venus, *Venus gallina*, *V. verrucosa*											
Edible portion	Mediterranean Sea			1.2				0.35 WW			178
Cockle											
Unspecified											
Flesh	Sydney, retail			1.3				31.2		59	213
Boiled in saltwater	Retail	78.9	11.3	0.3		Tr	48		3520		212
Cardium corbis											
Edible portion	SE Alaska	82.4	11.8	1.0	1.6						219
Chinocardium nuttallii											
Unspecified	NE Pacific									19.0	183
Crab											
Unspecified											
Unspecified	Unspecified									63.3-145.0	221
Meat	N. America			1.9						100	163
Edible meat	N. America									52-140	163
Body	NE Pacific									54.2	183
Leg	NE Pacific									45.9	183
Shop cooked	Sydney, retail			0.8				53.1		105	213
Boiled	Unspecified	72.5	20.1	5.2		0	127		370		212
Canned	Unspecified	79.2	18.1	0.9	0	81			550		212
Canned	Unspecified									55-77	197
Cancer pagurus											
Male	Netherlands			0.5						90.8 TS	228
Female	Netherlands			0.4						93.0 TS	228
Scylla serrata											
Minced edible portion	India	79.23	17.50	0.21	1.39	2.70	82.69		186.8		208
Crab, Alaska King, Unspecified											
Edible meat, frozen	N. America									62.3 TS	163
Crab, Blue											
Unspecified											
Unspecified	Japan			2.22						63	163
Callinectes sapidus											
Cooked, canned meat	Unspecified			1.6				0.61-0.72 WW			178
Canned	Unspecified			2.1				37.6			186
Raw edible flesh	Virginia, retail	78.83	16.42	0.77	2.06				62.9		167
Cooked edible flesh	Virginia, retail	74.89	21.18	1.21	2.42				57.2		167
Handpicked	Unspecified									100	197
Mechanically extruded	Unspecified									105	197
Brine flotation	Unspecified									95	197
Raw body meat	N. Carolina			1.3				46.6			181
Cooked body meat	N. Carolina			1.3				46.6			181
Cooked, frozen body meat	N. Carolina			2				41.8			181
Edible tissue:											
raw	Mississippi									49	195
frozen	Mississippi									48	195
cooked	Mississippi									25	195
Cooked	Unspecified									120	198
Crab, Blue Swimmer, Unspecified											
Flesh	Sydney, retail			0.8				33.3		54	213
Crab, Chinese, *Eriocheir sinensis*											
Muscle: FW	Unspecified			0.92				TG 19.3 PL 45.2		80	173

Table 2—Shellfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Crab, Chinese, *Eriocheir sinensis* (continued)											
Muscle: SW	Unspecified			0.85				TG 17.0 PL 51.4		90	173
Male	Netherlands			1.2						90.5 TS	228
Female	Netherlands			1.5						89.1 TS	228
Crab, Dungeness, *Cancer magister*											
Meat	Unspecified			1.0				0.34-0.38 WW			178
Body	NE Pacific	78.1	19.3	0.87	1.81						219
Leg	NE Pacific	78.9	18.4	0.82	1.95						219
Body, cooked & commercially processed	NE Pacific	80.1	16.7	0.80	2.51				879.2		180
Same as above but freeze dried	NE Pacific		83.87 DW	4.00 DW	12.65 DW				4.42 DW		180
Leg, cooked & commercially processed	NE Pacific	78.9	18.3	0.78	2.43				805. 2		180
Same as above but freeze dried	NE Pacific		86.45 DW	3.72 DW	11.51 DW				3.82 DW		180
Crab, Green Atlantic, Unspecified											
Edible meat, fresh	N. America									40	163
Crab, Japanese "Kegani", Unspecified											
Meat, canned	N. America									50	163
Crab, Jonah Atlantic											
Unspecified											
Edible meat, fresh	N. America									70	163
Cancer borealis											
Cooked meat	NW Atlantic	78.0		1.1				45.7		78.4	201
Unspecified	NW Atlantic									70	197
Unspecified	Nova Scotia	78.2	16.2	1.90	1.47	3.11			276.36		203
Cooked meat	NW Atlantic									75	198
Crab, King											
Unspecified											
Meat	Unspecified							42.5			163
Paralithodes camtschatica											
Edible portion	Unspecified, retail									60	198
Cooked legs & claws	Unspecified			1.6				0.70-0.85 WW			178
Body	NE Pacific	86.1	11.6	0.60	2.34						219
Legs	NE Pacific	86.0	13.5	0.69							219
Composite	NE Pacific	79.6	18.2	1.16	1.89						219
Crab, Mangrove Mud, Unspecified											
Flesh	Sydney, retail			0.7				34.5		40	213
Crab, Queen											
Unspecified											
Meat	Unspecified							49.6			163
Edible meat, frozen	N. America									60	163
Chionoecetes opilio											
Legs & shoulder muscle	Unspecified			0.70				0.26 WW			178
Leg & claw meat, precooked & frozen	Canada	80.6	15.3	1.14	2.07	0.075			401.58		203
Body meat, precooked & frozen	Canada	82.9	16.0	0.86	1.71	0.054			352.26		203
Canned	Retail	82.5	14.2	1.05	2.01	0.280			703.50		203
Frozen	Retail	80.9	15.6	0.99	2.04	0.270			505.92		203
Muscle	Unspecified			0.75							164
Edible portion, frozen	Canada, retail	80.6	18.5	1.4	2.0		90		539		177
Crab, Red Atlantic, Unspecified											
Edible meat, fresh	N. America									50	163
Crab, Red											
Geryon quinquedens											
Cooked meat	NW Atlantic	81.6		0.9				45.3		78.1	201
Legs & claw meat, precooked & frozen	Nova Scotia	80.8	15.0	0.99	1.44	1.59			331.20		203
Body meat, precooked & frozen	Nova Scotia	80.9	15.1	0.88	1.75	1.27			179.50		203
Unspecified	Unspecified									70	197
Cooked meat	Unspecified									60	198
Unspecified	Unspecified							45.3		78	199
Pleuroncodes planipes											
Whole crab, pulp	NE Pacific	79.97	8.23	1.63	4.00			45.93			218

Table 2—Shellfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbohydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Cholesterol (mg%)	Source no.
Crab, Rock Atlantic, Unspecified											
Edible meat, fresh	N. America									90	163
Crab, Rock, *Cancer irroratus*											
Cooked meat	NW Atlantic	79.1		1.2				42.3		70.9	201
Unspecified	Unspecified									70	197
Cooked meat	Unspecified									60	198
Crab, Snow											
Unspecified											
In water	Sydney, retail			2.2				29.6		192	213
Chionoecetes bairdi											
Boiled:											
body shoulder	Alaska	80.0	18.8	1.6	0.4			57.9			196
merus	Alaska	78.6	19.9	1.5	1.2			56.9			196
propodus-carpus	Alaska	81.4	16.6	1.5	1.1			56.0			196
claws	Alaska	80.0	18.0	1.0	1.3			53.7			196
whole body	Alaska	79.4	18.8	1.5	1.0			56.3			196
Canned	Unspecified	78.2	19.5	1.0	1.6			57.3			196
Crab, Toad Atlantic, Unspecified											
Edible meat, fresh	N. America									90	163
Crayfish											
Unspecified											
Meat, fresh	N. America									120	163
A. pallipes											
Muscle	Unspecified			1.77							164
Lobster											
Unspecified											
Raw	Unspecified									200.0	221
Canned	Unspecified									82.7-220.0	221
Unspecified	Cuba									70.0	221
Unspecified	Chile									78.0	221
Boiled	Unspecified								249		217
Canned	Unspecified			0.8-1.1				0.2 WW			163
Meat	N. America			1.5						85	163
Canned meat, drained	Unspecified			1.1				0.2 WW			194
Boiled	Unspecified	72.4	22.1	3.4		0	119		330		212
Cooked product	Unspecified									100	197
Homarus gammarus											
Wild, boiled:											
claw meat	England	77.78	13.79	1.10		1.05					220
tail meat	England	75.68	17.50	1.22	1.94	0.82					220
body meat	England	67.12			1.50						220
Farmed, boiled:											
claw meat	England	75.84	16.08	1.16	1.90	0.97					220
tail meat	England	74.72	16.79	1.28	1.82	0.45					220
body meat	England	67.48			1.73						220
Lobster, American											
Unspecified											
Meat	N. America									170	163
Canned	N. America									90	163
Homarus americanus											
Edible portion	NW Atlantic									70	198
Edible portion	Unspecified									100	197
Edible portion:											
in brine	Canada, retail	81.2	15.8	1.2	2.4		78		689		177
breaded	Canada, retail	59.6	13.4	9.2	2.0		204		512		177
Lobster, Sand, Unspecified											
Flesh	Sydney, retail			1.1				35.1		95	213
Lobster, Spiny											
Unspecified											
Edible meat, frozen	N. America									70	163
Panulirus argus											
Cooked meat	Florida									106	198
Flesh	Unspecified			1.2				0.63 WW			178
Lobster, Southern Rock, *Jasus lalandii*											
Tail meat	Unspecified			1.0				0.39 WW			178
Lobster, Sydney Rock, Unspecified											
Flesh	Sydney, retail			1.2				35.1		79	213
Lobster, Tropical, Unspecified											
Flesh	Sydney, retail			1.0				37.4		58	213

Table 2—Shellfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Lobster, West Aust., Unspecified											
Flesh	Sydney, retail		1.0					28.5		52	213
Mussel											
Unspecified											
Raw	Unspecified								286		217
Bottled	Sydney, retail			2.6				54.0		77	214
Fresh	Sydney, retail			2.1				34.4		45	213
Bottled	Sydney, retail			2.7				39.1		62	213
Raw	Retail	84.1	12.1	1.9		Tr	66		290		212
Boiled	Unspecified	79.0	17.2	2.0		Tr	87		210		212
Cooked product	Unspecified									70	197
Mytilus platensis											
Soft tissues	Argentina			1.4				45			176
Perna canaliculus											
Whole, frozen	N.Z.	78.2	13.9	2.20	2.21			57.8	319		190
Mussel, Blue											
Mytilus edulis											
Cooked meat	Unspecified									60	198
Flesh:											
male	Unspecified	79.9	11.8	2.5	2.1	3.5					205
female	Unspecified	79.8	11.7	2.3	2.0	3.3					205
Seasoned retort pouched:											
male	Unspecified	62.5	24.3	5.6	3.0	4.6					205
female	Unspecified	61.5	24.8	5.2	3.2	4.4					205
Seasoned retort pouched, smoked:											
male	Unspecified	48.5	24.1	5.8	2.4						205
female	Unspecified	47.0	24.4	5.6	2.8						205
Edible portion	NE Pacific									25.8	183
Whole, raw	NW Atlantic	80.20	12.3	2.05	1.70						200
Whole, cooked	NW Atlantic	78.91	14.05	2.31	1.53						200
Meat	United Kingdom		58.7 DW	7.0 DW	11.8 DW	22.5 DW	4.92 DW				175
Unspecified	Unspecified							36.00		60	199
Flesh	Unspecified			2.7				0.83 WW			178
Flesh	Unspecified			2.0				1.06 WW			178
Whole body, 1 yr, monthly sampling	Duxbury, MA	77.2		1.9	1.7			27-46			198
Same as above but cooked	Duxbury, MA	76.8		2.3	1.4			40-44			198
Mussel, California, *Mytilus californianus*											
Flesh	Unspecified			1.8				0.72-0.83 WW			178
Mussel, Horse, *Modiolus barbatus*											
Flesh	Unspecified			2.0				0.97 WW			178
Mussel, Mediterranean, Unspecified											
Flesh	Unspecified			1.3				0.38 WW			178
Mussel, New Zealand, *Mytilus canaliculus*											
Flesh	Unspecified			3.3				1.65 WW			178
Octopus											
Eledone cirrhosa											
Digland oils	Scotland			15.4				55.5 TL			187
Octopus sp.											
Muscle skin XS	Australia, retail							52.5			179
Paroctopus hongkongensis											
Edible portion	NE Pacific	84.9	13.2	0.83	1.58						219
Octopus, Common, *Octopus vulgaris*											
Flesh	Unspecified			0.8				0.31 WW			178
Oyster, Unspecified											
Raw	Unspecified								133		217
Fried	Unspecified								205		217
Meat	N. America			2.0						50	163
Meat	N. America									37-150	163
Unspecified	Japan			1.71						76	163
Raw	Unspecified		20				75				184
Bottled	Sydney, retail			2.6				40.1		57	214
Bottled	Sydney, retail			2.6				28.9		72	213
In oil	Sydney, retail			7.7				31.0		38	213
Raw	Retail	85.7	10.8	0.9		Tr	51		510		212
Meat	Unspecified							31.4			163
Meat	Unspecified							11.1			163

Table 2—Shellfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbohydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Cholesterol (mg%)	Source no.
Oyster, Alaskan, *Ostrea lurida*											
Edible portion	NE Pacific	86.3	10.6	0.5	1.9						219
Oyster, Eastern, *Crassostrea virginica*											
Flesh	Unspecified			2.1				0.74-0.99WW			178
Freeze dried flesh	Chesapeake Bay		9.18 DW	9.35 DW	4.94 DW						171
Fresh flesh	Unspecified	81.8-89.8							156-496		224
Processed, various methods	Unspecified	69.9-92.4							8.02-1597		224
Edible tissue:											
raw	Mississippi									63	195
frozen	Mississippi									84	195
cooked	Mississippi									59	195
Raw edible flesh	Virginia, retail	82.20	8.59	2.36	1.40				111.8		167
Cooked edible flesh	Virginia, retail	70.96	12.22	3.89	1.94				151.7		167
Unspecified	Unspecified							31.2			165
Soft tissues	New Brunswick			1.6				31.5			225
Fresh meats	Hatchery-reared									20 TS	168
Fresh meats	Long Island, N.Y.									32 TS	168
Fresh meats	Cape Hatteras, USA									32 TS	168
Fresh meats	Delaware Bay, USA									33 TS	168
Fresh meats	Chesapeake Bay, USA									30 TS	168
Fresh meats	St. Augustine									36 TS	168
Oyster, European, *Ostrea edulis*											
Flesh	Unspecified			1.7				0.42 WW			178
Soft tissues	Great Britan			1.7				11.30			225
Total flesh	Unspecified			1.7				PL 18.6			164
								TG 6.6			164
Oyster, New Zealand, *Ostrea lutaria*											
Flesh	Unspecified			3.1				1.62 WW			178
Oyster, Pacific, *Crassostrea gigas*											
Whole	NE Pacific	81-85	8-11	2.6-3.2	0.8-1.2	3.6-4.3			69-143		180
Same as above but freeze dried	NE Pacific		49-57 DW	17-18 DW	5-6 DW	19-28 DW			0.5-0.8 DW		180
Flesh	Unspecified			2.3				0.97-1.10WW			178
Entire body	Unspecified			2.5				53.8			186
Freeze dried flesh	Korea		7.91 DW	11.4 DW	6.05 DW						171
Edible portion	NE Pacific	80.5	10.4	1.26	1.43						219
Flesh	Unspecified	84.9	9.2	1.7	1.2	1.8					204
Seasoned retort pouched	Unspecified	46.5-54.1	23.9-28.4	4.0-5.1	3.1-4.2	5.2-6.7					204
Lipids	Japan									2385	193
Whole body	NE Pacific			2.5-3.9						115-160	183
Bottom cultured:											
whole meats	Canada		6	8	12						227
Tray cultured:											
whole meats	Canada		6	8	10						227
Oyster, Sydney Rock, Unspecified											
Flesh	Sydney, retail			2.3				29.0		38	213
Periwinkle											
Unspecified											
Cooked probably boiled in seawater	Retail	79.1	15.3	1.4		Tr	74		1140		212
Littorina littorea											
Flesh	Unspecified			3.6				1.88 WW			178
Prawn											
Unspecified											
Cooked probably boiled in seawater	Retail	70.0	22.6	1.8		0	107		1590		212
Macrobrachium rosenbergii											
Cultured:											
whole, fresh	Louisianna St. Univ.			3.18				28.3		113	172
Feeding experiment:											
whole, fresh:											
Diet 1	Hatchery-reared			1.21				47.4			216
Diet 2	Hatchery-reared			1.72				48.1			216
Cultivated:											
unspecified	Unspecified							44.5-46.5			164
Commercial diet:											
whole	Unspecified							44.5			199

Table 2—Shellfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Prawn, *Macrobrachium rosenbergii* (continued)											
Above plus "w3" FA:											
whole	Unspecified							46.5			199
Prawn, Banana, Unspecified											
Flesh	Sydney, retail			1.3				23.6		175	213
Prawn, Indian:											
Metapenaeus affinis											
Muscle, fresh	India			1.0				29.6		62 % unsap.	182
M. dobosoni											
Muscle, fresh	India			1.2				34.3		67 % unsap.	182
M. monoceros											
Muscle, fresh	India			0.7				30.5		32 % unsap.	182
Parapenaeopsis stylifera											
Muscle, fresh	India			1.0				37.6		59 % unsap.	182
Penaeus indicus											
Muscle, fresh	India			1.0				33.7		49 % unsap.	182
Penaeus indicus											
Minced edible portion	India	77.39	20.90	0.35	1.40	0.80	89.90		209.00		208
Prawn, King											
Unspecified											
Flesh	Sydney, retail			1.5				28.5		169	213
Fresh	Sydney, retail		1.4					36.1		158	214
Penalus latisulcatus											
Unspecified	Australia, retail							44.2			179
Prawn, Royal Red, Unspecified											
Flesh	Sydney, retail			1.5				29.1		192	213
Prawn, School, Unspecified											
Flesh	Sydney, retail			1.4				26.6		203	213
Quahog, *Mercenaria mercenaria*											
Cooked meat	NW Atlantic									65	198
Quahog, Ocean											
Unspecified											
Meat:											
Triglycerides	Unspecified							28.9			163
Phospholipids	Unspecified							27.1			163
Artica islandica											
Flesh, fresh	N.B., Canada			0.34-0.80				PL 58.05 TG 28.41			166
Flesh, fresh	N.S., Canada			0.69				PL 64.01 TG 15.15			166
Phospholipids	Unspecified							45.3			164
Triglycerides	Unspecified							12.3			164
Scallop											
Unspecified											
Unspecified	Unspecified									33.0-60.0	221
Raw	Unspecified								255		217
Steamed	Unspecified								265		217
Breaded	Retail			6.3				0.7 WW			163
In batter, whole, frozen	Retail			6.3				0.7-1.1 WW		11.3	194
Meat	N. America			0.2						35	163
Muscle	N. America									60	163
Cooked product	Unspecified									30	197
Flesh	Sydney, retail			1.5				43.2		29	213
Steamed	Retail	73.1	23.2	1.4		Tr	105		270		212
Pecten sp.											
Flesh	Unspecified			0.91				0.43 WW			178
Adductor muscle	Unspecified			0.82				0.29-0.33WW			178
Patinopecten yessoensis											
Hepatopancreas	Japan			2.7-13.3				24.6-48.3			188
Pecten novaezealandiae											
Whole, frozen	N.Z.	82.4	14.3	0.66	1.57			54.60	149		190
Scallop, Icelandic, *Chlamys islandica*											
Edible portion	Unspecified									43	198
Scallop, Pilgrim, *Pecten jacobaeus*											
Whole	Unspecified			1.5				0.42 WW			178
Scallop, Queen, *Equichtamys bifrons*											
Unspecified	Tasmania							51.1			179

Table 2—Shellfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbohydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Cholesterol (mg%)	Source no.
Scallop, Rock, Purple Hinged, *Hinnites multirugosus*											
Adductor muscle	NE Pacific		70 DW	2 DW	4 DW	24 DW		52-57			215
Scallop, Sea, *Placopectens magellanicus*											
Edible portion	NW Atlantic									36	198
Adductor muscle:											
cultured	Newfoundland	78.59	17.69	0.51	1.68	1.53					209
wild	Newfoundland	78.50	17.40	0.48	1.60	1.99					209
Edible portion, frozen	Canada, retail	78.5	15.2	1.0	1.6	3.7	89		161		177
Breaded, battered, frozen	Canada, retail	59.6	13.4	9.2	2.0	15.8	204		512		177
Entire edible portion	Unspecified			<1				58.1			186
Raw edible flesh	Virginia, retail	77.91	15.08	1.00	1.22				87.3		167
Cooked edible flesh	Virginia, retail	68.70	22.34	1.59	1.44				113.2		167
Sea Urchin, Unspecified											
Ovary	Japan			3.12						498	163
Sea Urchin, Atlantic, *Strongylocentrotus droebachiensis*											
Shell contents, frozen	Nova Scotia:										
	Herring Cove			1.46-2.45				48.7-57.9			222
	St. Margaret's Bay			0.21-0.69				46.5-51.6			222
Shrimp											
Unspecified											
Canned:											
fluid	Unspecified								823-1986		226
meats	Unspecified								716-1592		226
Unspecified	Unspecified									96.5-226.0	221
Fresh peeled	Unspecified									164.0	221
Canned	Unspecified									175.5	221
Frozen	Unspecified									138.7-155.7	221
Frozen	Canada, retail	81.9	16.9	1.0	1.7		81		520		177
Breaded, fried, frozen	Canada, retail	54.5	10.5	17.0	2.5	15.5	261		733		177
Breaded, not fried, frozen	Canada, retail	60.0	12.6	1.4	2.5	23.5	161		649		177
Raw	Unspecified								161		217
Fried	Unspecified								187		217
Canned, drained	N. America			1.1						150	163
Edible meat	N. America									157-200	163
Edible meat, fresh	N. America									140	163
Cooked	NE Pacific									128.9	183
Canned	NE Pacific									160.5	183
Cooked product	Unspecified									100	197
Breaded	Retail			1.1				0.3 WW			163
Breaded	Retail			1.1				0.3-0.4 WW		32.2	194
Meat	Alaska							43.5			163
Cooked probably in seawater	Retail	62.5	23.8	2.4		0	117		3840		212
Canned	Unspecified	74.9	20.8	1.2		0	94		980		212
Penaeus sp.											
Skin/muscle tissue	Malaysia, retail			0.7				44			185
Penaeus & Pandalus sp.											
Flesh	Unspecified			1.2				0.52-0.58 WW			178
Shrimp, Brown											
Penaeus aztecus											
Whole	Gulf of Mex.			0.665							170
Whole	Louisianna			1.32				41.8		90	172
Edible portion, frozen	Florida, retail			1.20				By lipid subclass		200.8	192
Penaeus aztecus aztecus Ives											
Frozen, 5 lb retail, 51/60 count	Louisianna	81.63								158	198
Frozen, 5 lb retail, 51/60 count	Texas	84.28								153	198
Penaeus aztecus subtilis Perez Farfante											
Frozen, 5 lb retail, 61/70 count	Brazil	80.48								161	198
Shrimp, Pacific, *Pandalus jordani*											
Fresh, processed	NE Pacific	78.6	18.8	1.55	1.85				479.4		180
Same as above but freeze dried	NE Pacific		87.95 DW	7.24 DW	8.66 DW				2.24 DW		180
Canned	NE Pacific	75.3	21.8	1.91	2.06				567.9		180

Table 2—Shellfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Shrimp, Pacific, *Pandalus jordani* (continued)											
Canned but freeze dried	NE Pacific		88.14 DW	7.73 DW	8.36 DW				2.30 DW		180
Shrimp, Pink											
Pandalus borealis											
Edible portion	NE Pacific	80.1	18.1	0.95	1.25						219
Pandalus montagui											
Whole, frozen males	U.K.			1.15-1.64				PL 51.95			174
Whole, frozen females	U.K.			1.86-3.62							174
Whole, frozen transitionals	U.K.			1.45-2.33				PL 42.15			174
Penaeus duorarum											
Whole	Gulf of Mexico			0.857							170
Penaeus duorarum duorarum Burkenroad											
Frozen, 5 lb retail, 41/50 count	Florida	82.97								159	198
Penaeus duorarum Perez Farfante											
Frozen, 5 lb retail, 51/60 count	Honduras	80.10								150	198
Shrimp, Prawn, *Pandalus borealis*											
Frozen, cooked, 5 lb retail, 250/350 count	Canada	81.80								184	198
Frozen, 5 lb retail, 250/350 count	Massachusetts	83.41								135	198
Shrimp, Rock, *Sicyonia* sp.											
Cooked meat	Florida									90	198
Shrimp, White											
Penaeus setiferus											
Cooked meat	Florida									90	198
Edible tissue:											
raw	Mississippi									96	195
frozen	Mississippi									11	195
cooked	Mississippi									91	195
Whole	Gulf of Mexico			0.734							170
Frozen, 5 lb retail, 51/60 count	N. Carolina	84.12								147	198
Penaeus setiferus Linnaeus											
Frozen, 5 lb retail, 16/20 count	Georgia	82.03								139	198
Frozen, 5 lb retail, 16/20 count	Texas	81.90								157	198
Penaeus vannamei Boone											
Frozen, 5 lb retail, 41/50 count	Ecuador	79.64								150	198
Snail, *Helix pomatia*											
Muscle tissue:											
control	West Germany			0.79				cf. ref 211			211
diet experiment	West Germany			1.02				cf. ref 211			211
Snail, L.T. Top, *Chlorostoma argyrostoma lischkei*											
Boiled flesh	Northern Japan			1.4				36.4			189
Boiled viscera	Northern Japan			5.6				32.3			189
Snail, Pond, Family *Viviparidae*											
Flesh	Unspecified			2.8				1.44 WW			178
Snail, Purple, *Thais clavigera*											
Boiled flesh	Japan			1.5				43.6			189
Boiled viscera	Japan			5.9				39.9			189
Squid											
Unspecified											
Raw, unwashed	Unspecified	78.7	14.97	1.38	1.09						207
Spray dried	Unspecified	4.4	81.20	2.11	4.10						207
Fresh	Sydney, retail			1.4				46.8		189	214
Family *Loliginidae*											
Unspecified	Australia, retail							48.2			179
Unspecified	Malaysia, retail							51.5			179
Illex illecebrosus											
Mantles or tentacles	NW Atlantic	76-87		1.05-1.85	0.3-1.8			55.4		108-336	198
Loligo sp.											
Muscle/skin XS	Malaysia, retail			1.1				48.1			185
Edible meat	India			0.8				46.3			125

Table 2—Shellfish (*Continued*)

Common/scientific names Description	Location	Moisture (%)	Protein (%)	Fat (%)	Ash (%)	Carbo-hydrate (%)	Energy (Cal/100g)	PUFA (% total FA)	Na (mg%)	Choles-terol (mg%)	Source no.
Squid (continued)											
Loligo opalescens											
Edible meat, frozen	NE Pacific	87		1.8	0.23					339	198
Loligo pealei											
Mantles or tentacles	NW Atlantic	82		1.1-1.8	0.8-2.0			49.2		171-450	198
Ommastrephes sloani pacificus											
Liver oil	Pacific							23.40			165
Sepioteuthis australis											
Unspecified	Australia, retail							52.1			179
Thysanoteuthis rhombus											
Liver oil	Pacific							23.70			165
Squid, Arrow, *Nototodarus sloanii*											
Skinned mantles	N.Z.	77.16	19.57	1.58	1.51	0.20					223
Fins	N.Z.	79.0	16.7	1.6	1.3	0.19					223
Arms & tentacles	N.Z.	76.9	19.7	1.8	1.4	0.18					223
Edible portion	N.Z.	77.5	19.2	1.7	1.4	0.19					223
Whole squid	N.Z.	76.4	18.5	3.1	1.8	0.23					223
Squid, Broad, *Sepioteuthis bilineata*											
Mantle	N.Z.	77.5	19.4	1.6	1.4	0.09					223
Fins	N.Z.	80.7	14.7	3.1	1.5	0.07					223
Arms & tentacles	N.Z.	80.9	15.4	2.3	1.4	0.12					223
Edible portion	N.Z.	77.9	19.1	1.9	1.4	0.10					223
Whole squid	N.Z.	78.6	17.6	2.2	1.5	0.12					223
Squid, Flying, *Todarodes* sp.											
Flesh	Unspecified			1.7				0.35 WW			178
Squid, Longfinned, *Loligo pealei*											
Frozen, edible portion, history unknown	NW Atlantic	81.34	16.33	1.67	1.09				43.94	80.65	191
Squid, Shortfinned, *Illex illecebrosus*											
Liver oil	Atlantic							30.80			165
Flesh	Unspecified			2.0				0.79 WW			178
Squid, Warty, *Moroteuthis ingens*											
Mantle	N.Z.	83.6	13.9	1.2	1.2	0.18					223
Fins	N.Z.	86.1	10.9	1.6	1.2	0.15					223
Arms & tentacles	N.Z.	81.7	15.8	1.3	1.2	0.15					223
Edible portion	N.Z.	83.2	14.1	1.3	1.2	0.17					223
Whole squid	N.Z.	80.3	14.5	3.4	1.4	0.19					223
Squid, Yarika, Unspecified											
Body	Japan			4.59						345	163
Whelks, Unspecified											
Boiled probably in seawater	Retail	77.5	18.5	1.9		Tr	91		270		212

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